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COPY FOR ADVERTISEMENTS.

Advertising copy (changes or new advertisements) should reach us Saturday Morning to insure insertion in the issue of the following week.

For the first issue in the month we should receive copy by Friday Morning of the week preceding.

In a letter to the Manufacturers' Record Messrs. Collier & Brown of Atlanta, Ga., consulting and designing engineers, write:

We would like to say that many of the first letters we receive from South Africa, Honduras and the most distant points come from our card in the Manufacturers' Record.

INQUIRY ABOUT THE SOUTHERN EDUCATION SCHEME NOT TO BE SUPPRESSED.

This week's space in the Manufacturers' Record is too valuable for any comment upon the Southern Educational Conference at Richmond beyond two or three references to features of the annual report of President Robert C. Ogden. In the face of the many questions which developments of the Southern Education Scheme have brought to the front during the past year—questions which can be fully answered only in a full and frank exposition of all features of the movement—Mr. Ogden blandly said:

The reports of former conferences will be consulted in vain for definite answers to the questions naturally asked by the large contingent now for the first time present.

That, of course, is an easy way to check questioning, to intimate that records of preceding gatherings of the kind would throw no light upon the latest. Such blandness may have suppressed questioning in the Conference, but it will not suppress it outside.

But there must be no such questioning as this, according to Mr. Ogden, for he said in his report:

The intrusion of disagreement into a domain of thought and sentiment so vast and so sacred would seem to be sacrilege. Thus the natural life of the Conference has been that of unity and agreement. The standing ground of common need is so broad, the truly vital points so evident and so eminent, as to forbid dissension; points of difference are so minor and inconsequent that perfect accord has been natural. Any other condition would be contradictory to the best humanity here in conference assembled.

That utterance is but the veneered form of the announcement made a year ago by a member of the Ogden party of 1902, the "great moral show," as he called it. He wrote in the New York Mail and Express:

The truth is there remain here many "unregenerates," as the younger men of the South call them, and this class, together with the humbler clergy of the Southland, have to be dealt with diplomatically before the last obstacle is out of the path of the great, just, humane and revolutionizing movement which we of Mr. Ogden's party will figure in history as the strongest feature in the renaissance of the South and the solidification of America upon an intelligent foundation. The humbler clergy who are setting their faces against the diffusion of learning will not give as much trouble to the cause as they may wish they could. They will get out of the way of the steam road-roller or be lost under its pressure.

These "unregenerates" and these "humbler clergy" have demonstrated pretty effectively that the steam road-roller has no terrors for them, and they will have little fear of being crushed. They will continue to ask questions and to compel a retrogressive modification of the Scheme even unto its dissipation.

They operate themselves something of a road-roller. It is automobile. It does not depend upon the outside even for its fuel.

Advertisements of Southern localities offering special advantages for the location of manufacturing enterprises will be found on pages 56 and 57.

TYPICAL SOUTHERNER OF THE MIGRATION.

The recent death in California, whither he had gone seeking health, of Mr. S. Morgan Smith of York, Pa., calls attention to an interesting career of one of the many Southern men who have added so much to the progress and prosperity of communities outside the South where they have settled. Mr. Smith was born February 1, 1839, in Davie county, North Carolina, the first son of John W. and Sarah Purdon Smith, of English, Scotch-Irish and French Huguenot descent. His parents were born in Davie county, as was also one grandfather, while a great-grandfather was a native of Frederick, Md., in which place a great-great-grandfather of the Beauchamp family of France settled when he emigrated to America. Young Smith was educated in the public schools of Davie county, and later attended the Moravian College at Bethlehem, Pa. He graduated from that institution in 1861, and became pastor of the Moravian Church at York, Pa. He served from 1864 until the close of the war as chaplain of the Two Hundredth Regiment, Pennsylvania Volunteers, and later was pastor of a church at Canal Dover, Ohio, for five years.

Compelled by a serious throat affliction to relinquish his ministerial work, he gave full vent to his strongly-developed inventive genius, his first commercial venture being a washing machine known as the Success. Thousands of these machines were sold in the United

States and foreign countries. These markets were also opened later to his water-wheels, the first of which was also known as the Success. From small shops in 1875, when he began to manufacture water-wheels, his business, now controlled by the S. Morgan Smith Co., was built up through his individual efforts to one employing about 400 persons and producing power-transmitting machinery which is used in this and many other countries. In addition to contributing to the industrial development of York, Mr. Smith identified himself with other business interests and with the religious and social life of the city, and his career has paralleled that of the flourishing Pennsylvania community.

SOUTHERN SUGAR INDUSTRY.

The convention of sugar-growers to be held at Macon, Ga., early next month has aroused unusual interest in a half-dozen Southern States, and is likely to induce practical results. The possibility of such results is indicated in a statement made by Capt. D. G. Purse of Savannah, an enthusiastic worker for the convention and a leader in the new sugar-cane movement in the South. Discussing sugar-cane products from the profit standpoint, he told the Macon Telegraph that on land adapted to sugar-cane twenty tons to the acre would not be more than an average yield. This crop would, with improved sugar-making machinery, produce 200 pounds of sugar to the ton of cane, or 4000 pounds to the acre, which, at 3 cents a pound, would give \$120 gross returns per acre. He estimated that the cost of planting, cultivating, harvesting and manufacture would average \$75 per acre, leaving a net profit of \$45 per acre. If syrup were made instead of sugar the yield, as estimated by Captain Purse, would be 600 gallons of syrup per acre, which, at 30 cents per gallon, would yield a gross return of \$180 per acre, while the cost of producing would be about \$60. Captain Purse's firm conviction is that the cultivation of sugar-cane in Georgia at any rate is going to develop to large proportions as a money crop. Commercial experience and scientific experimentation have given a foundation for Captain Purse's optimism, and it is hoped that the Macon convention may direct the attention of Southern agriculturists to an extension of cane-growing, either for syrup or for sugar.

THE INLAND WATERWAY.

Discussing his recent trip to Wilmington, Charleston, Georgetown, Savannah, Brunswick, Jacksonville, Fernandina and Norfolk in the interests of the proposed inland waterway to connect the Chesapeake bay with Beaufort inlet, Congressman John H. Small of North Carolina says that the project was endorsed by every commercial organization before which he and others of his party appeared, and that plans were made for the gathering of statistics to be formulated in a report for the

use of the board of United States engineers having the subject of this waterway in charge. Congressman Small was deeply impressed with the fine harbors of these Southern cities and their capacious outlets to the sea, and he is convinced that the commercial bodies or individuals most interested in overcoming the obstacle to commerce created by the danger in navigation around Cape Hatteras and Diamond Shoals may, by the presentation of proper data, demonstrate that the expenditure of between seven and ten million dollars for the construction of the waterway would be amply justified by the impetus given to commerce and its results in the aggregate of national wealth. Boards of trade and chambers of commerce in the Southern cities should lose no time in assuring a presentation of all the facts to Congress.

THE CRUSADE AGAINST THE SOUTH CONFESSED.

Lieut.-Gov. Curtis Guild, Jr., of Massachusetts has capped the latest "child-labor" agitation in the South by boldly unmasking its intent.

The Manufacturers' Record believes that the South must work out its own salvation, that it must face and solve all the problems of its own civilization without outside interference. It believes that the attempt of outsiders to take the lead in deciding how the South shall carry on its educational work, how it shall regulate its hours of employment, how it shall meet the race question, will inevitably do much harm. Much of this outside interference is impudence pure and simple, stimulated by a desire to run other people's affairs. Much of it is inspired wholly by a selfish desire, for the benefit of others, to injure and retard the South's progress. All of this can be said without reflecting on the well-meaning of the good, honest people who, misled by notoriety-seeking or hired agitators, have joined in this work. These agitations all retard the advancement of the best interests of the very people for whose welfare they are supposed to have been started. The race issue as lately raised in politics, and the attempt to force upon the South "the same education for blacks and whites," coming at about the same time, have already done infinite harm to the negro, and many years will be required to overcome the ill-effect upon that race.

The Manufacturers' Record has opposed these things, because, with the memory of the recent past, it has looked beyond the present and seen the inevitable evil which will follow, and in the same spirit it is opposed to the effort to force upon the South by congressional action in the interests of other sections the regulation of the hours of labor and the form of child-labor laws as advocated by many visionary theorists. The Manufacturers' Record is opposed to child labor, and those who attempt to claim that it favors child labor either wilfully make a misstatement—to call it by a mild name—or are densely ignorant of its position. But the Manu-

facturers' Record recognizes some sad realities which exist in this world. It recognizes that conditions must be met and problems solved by sanity and discretion, and not by kindergarten sociology and hysterics. It recognizes the origin of this agitation as a scheme of some narrow-minded outside people to injure the South for their own benefit—a scheme to retard the South's progress in order that its rivalry with other sections may be halted. Again and again have these facts been pointed out.

In 1897 Curtis Guild, Jr., then editor of the Boston Commercial Bulletin, a leading textile paper, in an address before the New England Cotton Manufacturers' Association, said:

We are handicapped by the lower wages of the South. * * * Southern labor is not unintelligent labor. * * * Not only are we handicapped by the difference in wages of labor, but by the difference in the laws regulating labor. South of Mason and Dixon's line laws prohibiting the labor of children under the age of fourteen are either a dead letter or do not exist. It is cheap labor and long hours rather than cheap cotton that is draining capital from Massachusetts to Georgia. Now, we cannot grow cotton in New England, neither can we make local taxation of mill property uniform, neither can we force the Southern operative to strike for higher wages if he is content to work for his present remuneration. There are two things, however, that legislation can accomplish—it can make national regulation of the age of labor, it can make a national regulation of the hours of labor. Such legislation has long been demanded by the labor unions; it has even received the endorsement of the National Association of Wool Manufacturers. It might be necessary to amend the Constitution to do this, but the Constitution has been amended before.

There was the beginning of the latest propaganda against Southern mills in order ostensibly, but without ground in actual fact, to save New England mills, and Mr. Guild, now lieutenant-governor of Massachusetts, in an address last week before the same association, returned to the subject, and said:

Not proximity to the cotton fields, nor climate, but cheap labor, long hours, together with the utter absence of excitement and the extreme moderation of taxation explain the growth of the South. By the substitution of fine goods for coarse goods in our factories Massachusetts has managed to put off the day of settlement, even to show an increase; but ultimately the day of settlement must come, and we must face and deal with conditions that have reduced the spindles in some of our Northern States. Massachusetts, with the shortest time limit and the oldest age limit of any State in the Union, has to face the competition of States that limit neither age nor time. The solution of the problem is not in admitting little children to Massachusetts mills nor in lengthening the hours in Massachusetts, but here and now to begin a crusade that the demands of humanity, enforced by the law in Massachusetts, shall be enforced by the law in all the States. Let us not drag Massachusetts down to the level of Alabama; let us lift Alabama to the level of Massachusetts; let us have uniformity of factory laws throughout the United States. It is idle for Massachusetts to stand alone with wise restrictions when Alabama and South Carolina compete with the toil of infant fingers against the labor of men and women.

For unblushing impudence and ignorance these statements of Mr. Guild can scarcely be surpassed. He cares not for the children of the South nor the working people generally of that section. He pretends to save the textile interests of New England by attacking the development of the textile interests of the South. In this address, as in that in 1897, he is greatly disturbed because we cannot "force the cotton-mill operative to strike for higher wages if he is content to work for his present remuneration," and so he seeks to further the agitation against the cotton-mill interests of the South and to bring about discontent among Southern cotton-mill operatives in order that this section may be cursed

by the same labor troubles which Massachusetts has to endure.

Let the people of the South who rejoice that cotton mills have come to give employment to the thousands of poorer whites, many of whom had starved mentally and physically for generations, having had no chance for advancement, because they had no opportunity for work, see the motive behind the agitation against Southern cotton-mill conditions; let them see the selfishness back of it; let them see that all these outside plans to run Southern affairs have behind them some sinister scheme, and then they may understand the danger of being hoodwinked under the guise of philanthropy.

The Manufacturers' Record has a profound admiration for the genius of energy and ability which has created such marvelous wealth as New England enjoys. It numbers many of its warmest friends in that section, and it rejoices that, as a whole, New England people are too broad and too self-reliant to seek to destroy others that they may win. It would be a confession of weakness unlike the New England character, and yet New England has many men who, like Lieutenant-Governor Guild, are so narrow that they want to regulate all other people's affairs for their own selfish ends. They inspired the agitation for child-labor laws, not for the benefit of Southern children, but for their own pecuniary interests. Their aim is not to improve the character of Southern labor, as their agents, male and female, working under various disguises, claim, though the agents themselves may honestly think so—for that would mean a still stronger competition—but to hamper and restrict Southern manufacturers by stirring up labor troubles. These are hard words, but Lieutenant-Governor Guild's address proves that selfishness, and only selfishness, inspires him. The Manufacturers' Record rejoices that New England as a whole, or indeed the bulk of the membership of the New England Cotton Manufacturers' Association, is not of that character, for it knows that most of the men who made that section are willing to meet their competitors in a fair and open fight.

The agents of this agitation against the South, in whatever guise they appear, and whether they themselves are honest in their motives or whether they know the inspiring power back of them, know full well that the Manufacturers' Record has for twenty years been fighting for the best interests of the South regardless of where or whom it had to hit.

Some months ago the Manufacturers' Record said—and it may bear repeating—that these agitators should recognize that the cotton mill is the starting point in the evolution of improvement in the social condition of the hundreds of thousands of these poorer whites, lifting them to better employment, to better pay and to better social conditions. They should go out in the mountains and mountain coves and see how many people of the purest stock in the world have lived in poverty, in rags, in illiteracy, in a lack of all knowledge of religion, and lived this way because there was no possibility of employment. They should follow these families from those wretched homes and see what work in a cotton mill means to them, in better food, in better clothes, a better life and a chance for advancement such as they never had before. When these agitators have done this they may join the Manufacturers' Record in the profoundest sorrow that in the economy of

existence all children are not born to health and happiness and to freedom from hard work, but creation has not been so ordained. When they have studied the relative advantages and disadvantages of the homes and the life from which these people have come, and the homes and the opportunity for education, morality and health of cotton-mill employment, they will all become missionaries to urge the building of still more mills, that many more may find work, and then they will realize that the evolution of a whole people is not a hot-house work to be accomplished in a few years by arbitrary legislation, but if it is to be a real advance must move slowly, free from the wide hysterics of those who do not study every phase of such a change as is now going on in the South's social and industrial conditions; to this might be added, free also from the "crusades" inaugurated by such narrow-minded men as Lieutenant-Governor Guild and his ilk.

GOOD-ROADS' CONVENTIONS.

Good-roads' conventions, which are being held in many parts of the United States under the auspices of the bureau of public road inquiries, are arousing a strong sentiment in favor of the improvement of the public highways. The effect of this sentiment will be manifested in every part of the country. It will supply a need long felt by the American people. Illustrative of the value of such conventions may be mentioned the one recently held in Des Moines, Iowa. Governor Cummins had previously issued invitations to many public-spirited citizens in various portions of the State asking them to meet in the capital city to discuss this vital question of good roads and to select delegates to the great convention at St. Louis.

A more earnest, enthusiastic and intelligent body of men has rarely met in this country for the advancement of economic purposes. The question of how to build good roads was not so much discussed as how to provide the funds for the building of good roads.

Two of the addresses met with hearty applause, and both of these aimed to show the policy, justice and necessity for national aid in road-building. One of these was delivered by Col. J. B. Killebrew of Tennessee and the other by Judge A. H. McVey of Iowa. Colonel Killebrew went extensively into the history of road-building in the United States by the government. Beginning with the appropriation made for the construction of the Cumberland road in March, 1806, Colonel Killebrew traced the history of governmental aid in internal improvement up to 1846. After that period many millions of acres of the public domain were given in aid of the construction of railroads. He discussed the veto message of President Monroe of May 4, 1822, in which the President contended that the appropriation of money for internal improvements was a violation of States' rights. But the appropriations of money for internal improvements have been made so often since that period and for so many purposes once deemed unconstitutional that the view of the intent and meaning of the Constitution has been changed from what it was in the first quarter of the nineteenth century. The principle is now well established that money may be constitutionally appropriated in aid of any national improvements for the benefit of internal or foreign commerce. In fact, it has become a national policy to facilitate both internal and external commerce by giving aid to great rail-

roads, ship canals, by the improvement of water highways and the building of locks and dams.

Almost every occupation has felt the encouraging and beneficent influences of such appropriations, and there is no reason why the public highways may not participate in the benefits of such appropriations. Mr. Monroe admitted that it seemed to be reasonable and proper that the powers of Congress should be so construed as that the general government in its intercourse with other nations and in our internal concerns should be able to adopt all measures lying within the fair scope and intended to facilitate the direct objects of its powers as the public welfare may require and a sound and provident policy dictates.

In the paper accompanying this same veto measure Mr. Monroe said: "In whatever sense the term 'establish' is applied to postoffices it must be applied in the same sense to postroads." Now the general practice of the government of the United States for forty years has been to erect postoffices, deriving the constitutional authority to do so from the clause giving the power to Congress to establish postoffices and postroads.

Neither Colonel Killebrew nor Judge McVey advocated the policy of the general government entering upon the work of road-building, but thought the same kind of aid should be extended in the construction of highways that has been given to the construction of railroads. The public roads, it was asserted, are as continuous as the streams. They are greater highways and more used than the rivers. The internal commerce of the United States amounts to \$20,000,000,000, while the foreign commerce in 1902 was only \$2,285,040,359. For the movement of the latter all the large appropriations for the improvement of our harbors and rivers are made. It was instanced that over \$5,000,000 were appropriated for the improvement of the Saint Ste. Marie between Lake Superior and Lake Huron mainly to move the iron ores to the coal of Pennsylvania. This work was done for the ironmaster. The improvement of the rivers is done for the benefit of the steamboat owners. The appropriations for the railways benefit private companies. Why is it that the great initial fountains of commerce—the public highways—are not improved in part for the benefit of the great rural population, who furnish 63 per cent. of all the commerce of the country, 95 per cent. of which must be moved over the common highways? Is there any force in the logic, it was asked, that makes it constitutionally consistent to make improvements to enable a private yacht or a steamboat owned by a private corporation to run over a highway of water, and not permit improvements of the land highways for the safe passage of an automobile or a private carriage? Automobiles are rapidly extending the radius of private conveyance, and it is by no means improbable that within a decade they may be used in conveying persons and light freight over hundreds of miles, provided the roads are made passable for such vehicles.

The argument that seemed to be the most effective is the one which showed that though the direct tax amounts to only \$1 and the indirect tax to \$10, yet of the latter tax the farmers of the country reap but little benefit, although contributing fully 60 per cent. of this tax. It was argued that until the establishment of the rural routes the population of the cities had been served with mail facilities out of all propor-

tion to the amount of population or the amount contributed by them to the revenues of the general government.

It was suggested that the tobacco tax, now amounting to over \$50,000,000 per annum, should be distributed to the several States in aid of road-building. This tax is more evenly distributed than any other, for tobacco is used in every locality, and there are no prohibition States in reference to the use of tobacco, as there are in reference to the use of spirituous liquors.

Strong resolutions were adopted at the close of the convention in Des Moines in favor of government, State and county aid. The provisions of the Brownlow bill met with the heartiest approval, and the conclusion is that the demand for government aid will acquire the vigor of a national impulse.

FORESTRY AND RAILROADS.

The conclusions expressed by Prof. Herman von Schrenk of the bureau of plant industry and forestry of the National Department of Agriculture concerning the "use of timber by railroads and its relation to forestry" in a recent address before the New York Railroad Club deserve and demand the serious consideration of railroad-builders and lumbermen throughout the country with a view to action. Professor von Schrenk, who has given much attention to his subject in this country, is reported as having said that in no direction has there been more waste and utter disregard for the future than in connection with our forestry. With 11,000,000 ties used for renewal last year, one need not be considered an alarmist when the point is raised that such a drain must make some impression on the reserve of any country, no matter how large that reserve may be. He also remarked that the use of white oak for ties had cut down its supply. Today it was worth twice as much for the manufacture of barrels as for ties, and he suggested that red oak, properly treated, could be used for ties, with the result that such a course would tend to maintain the cooperage trade, which shipped casks over the railroads, thus increasing their traffic to that extent. He further said that the lead of the railroads in the conservative utilization of forest products would do much toward making it general.

Forest preservation, which Professor von Schrenk looks forward to, is to come from proper management of existing tracts of forest land so as to yield a steady supply from them, in replanting areas on which the forests have been cut down or where the lands are not fit for agricultural purposes, and furthermore, in the chemical treatment of timber which is to be exposed to the weather so that it may last longer and thereby check the enormous drain upon the forests. To secure the proper management of forests men trained in forestry would have to be employed, that they might select for cutting only such trees as had reached a maximum value, and also to see that a certain amount of replanting was done each year, as well as to care for the welfare of the forests in divers other ways.

No doubt forest preservation and wise conservatism in the use of forest products will come about in due time in the ordinary course of events, as the great demand for railroad ties, telegraph poles and the like reduces the amount of available timber, and correspondingly advances the market price thereof. But the desire of Professor von Schrenk and many other students of forestry is to prevent the present extravagant use of large quantities of

timber, and thereby avoid a condition of affairs which must necessarily result in a great increase in its market value, that would affect not only railroad and telegraph companies, but the general public. It must, however, be noted that railroad men are not indifferent to the problem of timber supplies. The only question is how to deal with it in a manner satisfactory to the shareholders of the companies and at the same time secure efficient results in maintenance of way. Last year the Illinois Central Railway Co., with wise forethought, set out a large number of catalpa trees in the South for the purpose of taking from them a supply of ties some years hence. Referring to the cultivation of this tree for ties and fence posts, Professor von Schrenk says that on properly-selected lands and in proper climates it will doubtless show ample returns upon the investment. Inasmuch as these conditions have been duly considered and complied with by the company, it will doubtless gather a liberal supply of good timber from its catalpa groves.

But there are other railroad companies which are not so fortunately situated as to be able to set out rapidly-growing trees to supply them with suitable ties. Such will sooner or later be brought face to face with the question of using either chemically treated ties or ties made of metal. Inasmuch as the latter have not yet won general favor for use in American methods of track construction, the prospect is that creosoted wooden ties will be used. This would probably be followed, in the case of large railroad companies, by the erection of plants for treating ties, while smaller lines will doubtless purchase ties already prepared. Professor von Schrenk is reported as saying upon this subject that in the future the large railroads will require the services of a man capable not only of superintending a preservative plant, but of dealing with and deciding all questions pertaining to forestry which may arise in the affairs of the company. He thinks that when once they can be shown to be in accord with sound business policy it will be but a short time when investments in forest lands will here be regarded with as much favor as they now are in Germany.

Another speaker at the meeting of the New York Railroad Club was Prof. B. E. Fernow, director of the New York State College of Forestry at Cornell University, who made the following startling declaration:

If we continue our methods of wastefully exploiting, wastefully using, increasing our consumption and destroying wood supplies as we have done, the end of them will come in fewer than thirty years.

Professor Fernow noted as some of the causes of waste of wood supplies: Wasteful exploitation of forests to provide freight traffic, destructive conflagrations caused by locomotive sparks, and wasteful use and destruction. He also said that while in Germany wood prices have risen during the last sixty-five years at an average rate of more than 1½ per cent. a year, a much more rapid rate of increase will be presently experienced in this country when new timber territory will no longer be available.

The conclusions of these two speakers are such as to show that they have given deep and careful thought to their subject. Their remarks merit the serious attention and deliberation of railroad managers and directors the country over, even more in those regions which now enjoy a plenitude of timber than in those more or less remote

from great forests. Doubtless the increased demand for wood for street paving, as well as for railroad building, will necessitate the taking of decisive action looking to the conservative use of our forest products. It would be well for the owners of forests, and lumbermen generally, as well as for the railroad companies and other consumers of lumber, if they heed the warnings expressed by such students of forestry as those just quoted, and take action in accordance therewith.

FARMERS AND EDUCATION.

One of the oldest and most influential bodies of agriculturists in the country is the East Tennessee Farmers' Convention, which has been meeting annually since 1872. The program for this year's gathering, which will be held May 22, 23 and 24, includes, with discussion of such topics as "The Cowpea for Soil Improvement," "Grazing vs. Stall Feeding," "The Mechanical Conformation in the Horse," "Grasses and Forage Crops," "Reclamation and Improvement of Wornout Soils," "The Silo," "Market Gardening in the South," consideration of subjects having a wider interest, such as "The Relation of the State Bureau of Agriculture to the Farmer," "The Value of Agricultural Education," "The Building of Good Roads," "The Commercial Interests of the Farmer" and "Rural Schools." The last topic is to be discussed by Prof. S. A. Mynders, State superintendent of public instruction, and it is likely that the address of Gov. J. B. Frazier on "The Greatest Need of Tennessee" will be found to have some bearing on the subject of popular education, to which the South, including Tennessee, has been giving marked attention during the past ten years.

TENNESSEE FLUORSPAR.

Something over 100 tons of fluorspar were brought to Nashville, Tenn., a few days ago from an extensive vein recently discovered near Rome, in Smith county, Tennessee. This vein is said to be 100 feet wide and the quality of the product is very high. It occurs in beautiful crystalline masses with distinct cleavage planes, which makes the mining very easy. The cost of mining is said to be 75 cents per ton, while the selling price is \$7. This shipment goes to St. Louis, Pittsburg and Ohio. Most of it will be used in blast furnaces, but a portion will be used in the manufacture of opalescent glass. This discovery adds another valuable mineral to the economic products of Tennessee, and will doubtless yield a greater profit per ton than any other mineral in the State.

The Southern Farm Magazine.

To anyone desirous of making a change of location there is no question of more importance or one more likely to influence his selection of a new home than the one of returns on his investment. Everything else being equal, it is to the interest of the farmer to have his investment as little as possible in comparison with the returns he expects. With that idea in view, Mr. Willbur McCoy of Jacksonville, Fla., who has given much attention to immigration work, took the trouble during a recent visit to the middle West to gather material for a comparison of crops in Ohio, Indiana, Illinois and Iowa as representing the North, with crops in Alabama, Georgia, Florida and the Carolinas as representing the South. He embodied the results of his investigations in an interesting paper, which is published in the May issue of the Southern Farm Magazine. His conclusions are that the Northern

farmer can secure as great or greater returns in the South in any industry he may engage in on 50 per cent. of the capital he has invested in his Northern farm, and in many instances 25 per cent. of his resources in the North, if invested in the South, will yield him better returns than he is at present receiving. These facts are worthy of consideration by individuals who are trying to secure adequate returns from high-priced lands in the North and West.

One of the agricultural industries which immigrants will find remunerative is sheep husbandry. The opportunities for that in the South are lucidly discussed by Col. J. B. Killebrew, who shows from his expert knowledge and wide-reaching experience the advantages of sheep-raising, specially in Kentucky, Tennessee, the northern parts of Georgia, Alabama and Mississippi and the Piedmont regions of the Virginias and Carolinas.

Two influences should be conducive to immigration—the railroads and the State governments. One railroad in the South has been notable as a pioneer in this field. It is the Southern Railway, and its policy as developed so successfully by Mr. M. V. Richards is epitomized by Mr. Edwin Maxey. That article illustrates the task before Southern railways and the methods by which they may be profitably performed. Another article by Mr. Norval E. Foard, dealing with Maryland farming opportunities, is in itself an illustration of what other Southern States should do, for it is the introductory chapter to a most interesting and comprehensive volume by Mr. Foard which the State board of public works will circulate as a means of attracting capital and men to Maryland.

The regular departments of the Magazine, including the practical talk to farmers in the South by Col. J. B. Killebrew and Peter Pechin's novel views of current events, will entertain a wide constituency. The Southern Farm Magazine is published monthly by the Manufacturers' Record Publishing Co. of Baltimore. Price \$1 a year.

Brickmaking Opportunities.

Southern industrial activities at present include an unusually heavy demand for building bricks. Established brick manufacturers in the section have been taxed to their utmost capacities in supplying the demand. New brick works are continually being erected, and established plants are being enlarged, yet in some localities the demand is not met. This indicates that excellent opportunities are available for the location of modern plants for manufacturing bricks.

Such an opportunity is offered by the conditions at Greensboro. This is one of the most progressive and flourishing cities of North Carolina. Its population has increased from 3200 in 1890 to 12,000 in 1900 and to 23,000 in 1903. The demand for bricks at Greensboro is such that they are being shipped there from various points, and yet the requirements are not being met readily enough.

This is emphasized in an open letter which one of Greensboro's leading business men has written. He calls attention to the demand, and states that his company alone will need 40,000,000 bricks this year in the construction of mills, and various other enterprises will also want large quantities.

Noting these conditions, the Manufacturers' Record is prompted to call attention to them and to suggest action on the part of manufacturers desiring to locate brick works in the South, or on the part of established manufacturers who may be in a position to extend their enterprises by locating branch works to handle the increased trade in different localities.

Manufacturers of Country Give Reasons for Their Faith in Prosperity.

Letters from manufacturers and other persons close to industrial activities in nearly thirty States of the Union, published in this week's issue of the Manufacturers' Record, present a body of authoritative opinion about the existing flourishing conditions of manufactures and trade in this country, in itself a most gratifying reason for the faith which is expressed in the letters as to developments in the next year or two. The letters are representative of the feeling in Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Delaware, Pennsylvania, Maryland, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama, Louisiana, Mississippi, Kentucky, Missouri, Ohio, Indiana, Illinois, Michigan, Wisconsin, Tennessee, Iowa and the District of Columbia.

Prosperity is revealed in the activity of individual industries, noted by themselves in their observations as to undertakings dependent upon them or upon which they depend, and in statements covering broader national and international energies. It is pointed out, for instance, that notwithstanding high prices, our export trade is being maintained; that the wonderful progress in the South and West and the development of territory recently acquired by this country are making demands for manufactured products which within the next few years must reach an enormous amount, and that the unusually favorable crop conditions, the April report of the wheat crop promising a banner year in that respect, with the probability of fair prices, indicate a large buying power among farmers, which should guarantee another year of good sales in agricultural implements and in other articles used in country districts, together with heavy traffic for the railroads already doing such a business with freight and passengers as, in one instance, to put an end to the plan of the American Institute of Mining Engineers for a special trip this summer to British Columbia, and in many instances to delay the receipt of raw material for manufactures on the one hand and on the other the shipment of finished products.

The railroads are pushing their orders for new cars, rails and other equipment, foundries throughout the country are being enlarged, and iron and steel mills are sold ahead in some cases for a year or more. Railroad extensions and enlargements of iron and steel works, both needed to meet the overwhelming demand upon them, and representing in the aggregate a cost of several hundred million dollars, are under way, but are hampered by the inability of manufacturers to deliver machinery and material as promptly as it is required, but nevertheless pointing to enough business in sight and enough money to handle it to keep everybody going for the next ten years at least. Many of these betterments will become effective shortly, but a trained observer in economics in his correspondence calls attention to the fact that a vast deal of capital is being locked up in such undertakings as canals and tunnels that cannot be productive for some time to come, but which are destined to do mighty service to the country in the future, and which involve enormous expenditures during the coming year.

Adding to the unlimited demand for all kinds of high-grade machinery, or, as it is otherwise put, "the insatiable demand for new and improved machinery and methods," which, when in operation, will

place this country further than ever in advance of competitors, is the great activity in building trades, reflected in the equipment of quarries with the latest improved machinery paralleling the growth of the use of labor-saving devices in handling coal, the better equipment of saw-mills and other woodworking plants with an extension of lumbering operations, all in spite of the high prices for building material which have prevailed for several months. A novel suggestion is made in this connection in the estimate that 180,000 new houses must now be built every year in this country to meet the need of immigration alone, as we are now receiving about 800,000 immigrants a year, while one company concerned with the building and equipment of factories for the production of one important class of building material says that it has now not less than fifteen of such plants in course of erection, representing investments of from \$25,000 to \$50,000 or more, and holds that fact as proof of the promise of general prosperity in building operations, which may be taken as a fair gauge of the situation. Moreover, many municipalities, small and great, are providing money for improvements, while the weekly record of the South shows a steady progress in the organization of new industries duplicating the earlier history of industry in other parts of the country.

A few thoughts from the mass of letters typify the general tone. Here are some of them: Though extensive improvements have been completed during the past year, additional ones are contemplated. The capacity of the plant has been doubled, but it is still months behind with its orders. Work is taxing the capacity of the plant. The shops are running overtime to fill orders. The plant is running overtime or working night and day to fill orders. The orders are far in excess of those in any preceding year. Orders for machines taken in April were greater than in any one month before. Even should this year's business not prove as good as last year's, there would be no discouragement, as that was a banner year.

This last sentence inclines toward the proposition worked out in one letter that there are cycles of prosperity and adversity, but though there is some inclination to look for less activity in the future, with continued increase of cost on all finished products, the gentleness of the inclination seems to be promised in the belief that the values of raw material are assuming more normal conditions. One writer sees danger in overcapitalization, though another finds no cause for apprehension in Wall street being overcharged with unmarketed securities, and a third is convinced that the situation will remain safe as long as the country does not again overestimate the extent to which investments can be carried as it did in the early nineties. The question of the currency is also considered, but the extra session of Congress next November is expected to meet "the crying need for more elasticity in the currency."

The only portentous cloud above the horizon of the vision of quite a number of manufacturers is the possibility of difficulties with labor assuming such proportions as to temporarily paralyze industry to the detriment both of employers and of employees. Suggestions on that point are varied. One is that there would be several years of fairly good times were it not for the aggressive position of labor,

another is that much depends upon the satisfactory settlement of the labor problem generally, while another is that both material and labor show a rising tendency, which, if continued, may check the promotion of new enterprises and the enlargement of existing ones. It is pointed out that extraordinarily good times are needed to justify prices now ruling in certain lines of material, and that the restless situation in labor circles is unsatisfactory. Where there are strikes and a plentitude of labor in some parts of the country, the letters show that in others wage-earners are well paid and generally contented, that everyone willing to work is profitably employed, with great difficulty being had to obtain intelligent help, or that skilled help enough cannot be found to meet the requirements of trade. If it were possible to solve the problem of the distribution of labor, there might not be any fear as that expressed that the greater unrest in the labor market may induce a crisis destructive of the unparalleled prosperity which the country is now enjoying.

Distinction is drawn, however, between the just and the unjust demands of organized labor, and there is strong hope that with the serious consideration the subject is receiving among employers throughout the entire country, and with the possession of sufficient foresight on the part of some leaders not to allow the unwise and irresponsible minority to mislead the conservative majority to the blocking of prosperity and the cutting off of their own income, good judgment and common sense on both sides will ultimately prevail in a better understanding between labor and capital. The truth is enforced, notwithstanding the fact that mechanical labor in this country is receiving much larger pay than in foreign countries, we have been able to produce goods here by improved methods at a cost that has enabled us to export goods to foreign countries at a profit, but that unreasonable demands of labor may make it harder to compete with foreign manufacturers and reduce American labor to the position it has reached in some foreign countries.

The interesting and suggestive letters follow:

Greater Elasticity of Currency Needed.

A. B. Farquhar, chairman A. B. Farquhar Co., Limited, York, Pa.: "The present outlook on the whole is favorable to a continuance of present business activity and prosperity for some time to come. Crop reports are unusually favorable, with probability of fair prices. We are still consuming about all the steel and iron that is manufactured, our factories are all busy, and, notwithstanding high prices, our exports are keeping up, with but little falling off since 1901. Our imports, however, for 1903 are \$200,000,000 more than for 1901, and there is some danger of tightness in the money market towards autumn, which may compel business men to draw in a little sail and go slow for a time. Our excess of exports over imports two years ago was \$650,000,000, while in the past year the margin in our favor was only about \$400,000,000. While this change is altogether normal, and has long been expected, nevertheless it needs some preparation to meet it. A vast deal of capital is now being locked up in undertakings that cannot be productive for some time to come—canals and tunnels destined to do mighty service to the country in the future, but for the present not

compensating the outlay in them—while enormous additional expenditures have been planned for the next year, reminding us too much of the panic of '73, brought on by quite similar causes. The crying need is more elasticity in the currency, without sacrifice of unquestioned convertibility—not greater volume. Had Congress seen fit to pass the amended Fowler bill, the wisest currency measure which has yet been brought to their attention, this need would have been met effectually and safely. With the assurance of an extra session and the passage of this measure, however, in November, a good deal of trouble might be discounted and the danger averted. We are not in danger from the trusts except so far as the government chooses to assist them in preying upon us. If the duty on trust products such as are now exported were immediately reduced 25 per cent., to be followed by further reductions as conditions warranted, there would be no need to bother about anti-trust laws; the business combinations called trusts would then be productive of more good than harm."

Danger in Overcapitalization.

Detroit Graphite Manufacturing Co., Detroit, Mich.: "Detroit has always been considered a very conservative city. In later years it has gained the reputation as a convention city, and during the entire summer months conventions follow each other so continuously that its streets are constantly thronged with strangers from all parts of the country. Thousands of Southerners have tested its hospitality during these convention times, and many Southern families find here rest and recreation during the summer months, but above and beyond all things, Detroit is a substantial manufacturing center. In several lines it has the largest production of any city in the Union. Its manufactured goods go to all parts of the United States and to all parts of the world. Its industries are controlled by men of brains and capital, and at the present time its factories are pressed to their utmost capacities to meet the demands upon them. There is nothing in the present aspect of affairs here to indicate a diminution in demand or supply, but as Detroit is only an integral part of the greatest Commonwealth the history of the world has ever known, and its business is but a reflex of the business everywhere in this great Commonwealth, we must look to the conditions of the country as a whole in order to prognosticate our own future prospects. There is a danger cloud in the immense capitalization of the last few years. The undigested millions of securities is a menace. In many respects the conditions are not unlike those preceding the great panic of 1873. At that time the great combinations of manufacturing enterprises were not known. It remains to be seen how much these combinations may be able to retard, if they do not entirely prevent, another panic. It is easily seen that the great combinations in the metal trades have controlled prices, kept them more uniform and stable, and have actually retarded operations by not overproducing. Undoubtedly a very great difference in present conditions would exist had all the manufactories in these lines remained in individual hands as formerly. This is not only true of the metal line, but of many other lines in which similar combinations have been formed. Labor is restive, and many strikes have already taken place this season, but compromises have prevented long-continued strikes. Labor is

receiving the best compensation of any age or nation, and this high price is a key to the great prosperity of the country, for while the manufacturer pays more for labor and for everything he has to buy, yet the laborer is the very best consumer of the manufactured product. This fact gives us a home market superior to any in the world, and places the manufacturer of this country in a very much better condition than that of any other. Our American cities are building up and being rebuilt with modern steel structures, which is distinctively an American idea. We are looking forward to the rebuilding of many of the old cities of Europe upon the American plan of steel construction. This will naturally give an impetus to the American manufacture of steel structural work and the various modern improvements employed in this kind of building. Wherever steel construction is used there must be methods employed for the preservation of this steel, and this fact gives great hopes for the future in our particular line of business, for already the superior graphite paint manufactured by this company is used to a very large extent for the preservation of steel."

For Amity in Industries.

Chas. Mundt & Sons, New York: "To the average business man, especially the manufacturer, the above question is one of great moment, as the price of raw material cuts a big figure in the cost of manufactured articles. Naturally in anticipating future orders the price of raw material, especially if it must be bought ahead, marks a very important item in the manufacturer's profits, as well as his chance to compete in the open market. We believe at the present that no one can complain of business, as most everyone has more orders than they can promptly fill. This may be said truly in all lines in the metal trade. The late advance in the price of copper, brass, lead and zinc would indicate a continuance of the present prosperous business for some time to come, but if one would follow the decades of prosperity you will find that we have at this time equaled, if not exceeded, the longest period of prosperity in the last fifty years. The demand for manufactured goods today is just as great as at any time during the last ten years, and the question might arise, has the combination of capitalists got control of the manufactured products to such a degree that they could restrict production enough to continue the present prosperity? It would seem to us that this is partially so, but we believe that the presidential election of 1904 will have more to do with the continuance of the present prosperous times than anything else. It would seem to us, if we take past history as an example, that the change of the political administration at Washington would have much to do with changing the business of the country. At least, such has been the fact in the past, but it would seem to us a good maxim to make hay while the sun shines, and not trouble ourselves too much as to what is going to be in the future, as really we do not believe that anyone at this time can make a correct forecast of business two or three years in advance, especially on the eve of a presidential election. We believe that the labor trouble will be settled amicably, as it would seem that the labor leaders have sufficient foresight to not allow their organizations to obstruct business so far as to block business prosperity and cut off their own income."

Reasons for Faith in the Future.

Rawson & Morrison Manufacturing Co., Cambridgeport, Boston, Mass.: "The present conditions are about all that could be desired, with the exception of a few things that to our limited vision seem un-

necessary. The first, and perhaps most important of the complaints of manufacturers, and the one for which there does not seem to be any adequate remedy in sight, is the matter of railroad freight transportation. The railroad companies, notwithstanding the fact that they have had several years' warning of the growth and expansion of business, have allowed things to drift along in old-established ruts, and some of them, at least, do not seem to know how to get out of them. There is no doubt but that many of the railroads have outstanding all the bonds and stocks that their properties will bear, and now, with their equipment worn out and terminal facilities inadequate, they find themselves unable to handle this increased and increasing business, and have nothing upon which they can raise the large amount of money necessary to renew and add to their facilities for handling freight. The shortage of cars is or has been the standing excuse of nearly all the railroad companies, but when interested parties made a tour of inspection and found hundreds of empty cars with rusty wheels on side-tracks, the excuse was changed to shortage of motive power. However, no matter what the excuse, the fact remains that transportation facilities have not kept pace with the increase and growth of the manufacturing and mercantile business. When it takes four to six weeks, as frequently happens, to move a carload of freight 200 miles, it makes it very hard to do a satisfactory manufacturing business.

"Another complaint frequently heard is the shortage of certain kinds of material, notably structural steel, pig-iron and coke. There are always good reasons for hesitancy on the part of manufacturers using large amounts of iron and steel in placing orders for perhaps hundreds of thousands of dollar worth of material at a fixed price, with the possibility always staring them in the face of a sudden collapse of demand for their product and consequent drop in prices. The fact that the manufacture of iron and steel is now practically controlled by one corporation does not tend to relieve this hesitancy, because while the manufacturers may feel reasonably safe as to price, yet they know that this corporation has the power to curtail production and for selfish purposes make it harder for them to do business at a profit.

"Along this same line comes another complaint—the tendency to centralize all manufacturing business, thus wiping out the small shops and factories and almost obliterating communities that have in times past been good customers for certain lines of goods. These are some of the existing conditions of which we have more or less reason to complain. As for the outlook for future continuance of the present prosperous conditions, we can see nothing that indicates any serious obstacle to its continued growth, even beyond the present enormous proportions. We manufacture hoisting engines, cableways, automatic coal-handling machinery, quarry and mining engines and special electric hoists, and from orders already on our books and the volume of inquiries received daily we fully expect that this will be the banner year in our history. The large demand for all kinds of building stone has compelled the equipping of quarries with new and improved machinery, and the great demand for coal has caused the erecting of a large number of automatic coal-handling plants. A great many look on the constant and increasing unreasonable demands of the labor unions as a menace to the continuance of the present prosperous conditions, and while we do not take as pessimistic a view of the matter as some, yet we think we can see that

more or less danger may arise from some of these demands. When the time comes, either from short hours of labor or from decreased output, that the product of a day's labor will not sell for enough to pay the laborer and for the raw material used, then disaster will come to the employer and consequent trouble to the whole country. As the chief aim of the average labor union seems to be shorter hours of labor, and the natural resultant of smaller product for a day's work, it does look as if the time may be near when a small manufacturer will have nothing left for himself after paying for the labor, raw material and running expenses. We have made this answer longer than was intended, but it is hard to answer a question of this kind without giving some reasons for the 'faith that is in us.'"

Many Evidences of Prosperity.

S. P. Brown, Collier & Brown, consulting and designing engineers, Atlanta, Ga.: "We consider the prospect for the immediate future in the work along the lines in which we are engaged as very favorable. We have more work in our office now than ever before, and are receiving inquiries from more remote and less developed sections than in time past. We have seriously considered placing a special agent on the Pacific coast to attend to work there, concerning which we have been lately receiving many inquiries and proposals, and we are also now considering sending a man to Cape Colony, South Africa, to represent us for much the same reason. Many of the banks in this section of the country have increased their capital anywhere from one-third to the full amount. Small municipalities are everywhere voting for improvements, and new industries are being organized daily, all of which show the general prosperity of the farmers and business men in the surrounding country. We suppose you desire us to speak from our actual experience, as it is by the accumulation of such evidence that you will base your ultimate opinion. For this reason, we speak thus fully of our own condition and the way it leads us to consider the future."

American Ideas in the Lead.

Wm. Lodge, president the Lodge & Shipley Machine Tool Co., Cincinnati, Ohio: "Conditions at present all point to a very healthy demand and a continuance of the present business for some time to come, and for the following reasons: The rolling stock and general equipment of all the railroads is badly run down, and there is an absolute and immediate necessity for replacing worn-out rolling stock and supplying a sufficient amount of new to meet the requirements. I heard it stated in this city recently that some of the manufacturers had goods piled up ready for shipment to such an extent that they were obliged to stop their factories, because the railroads could not move the goods. The amount of acceleration in the machine trade existing today comes about for another reason. The demand for electrical equipments of all descriptions is enormous, the machine-shop owner of today being quite willing to spend double for his equipment in order to have it electrically driven. A few years ago that would not have been considered at all, but the advantages of electrical driving are so apparent and permits such an easy rearrangement of machines in any position, and almost any distance, that it has become as much a necessity as our daily bread. We see nothing in the way of a continuance for years to come, perhaps not in as great a quantity, but as a steady business, unless the demands of labor become so unreasonable as to make the goods so high-priced that the buyer cannot afford to purchase. If this feature of our

development can be kept within bounds, I know of no reason why good business should not continue indefinitely. In addition to this, I believe that should our home market fail to take all the manufactured product that can be made, the foreign markets are waiting with wide-open arms to receive the product of this country, and all that is necessary is for our manufacturers to go after these markets intelligently and obtain them, for instance. The improvement and ideas put into the various lines of American manufacture are so far in advance of the same classes of goods offered by other export countries, such as England and Germany, and are capable of doing so much more and better things, that even were the price higher I think on presentation of the goods and their advantages they will find a ready sale all over the world, and the amount of new business that has been developed within the last fifteen or twenty years might be safely stated as double to what was in existence twenty years ago, and in addition to all that, the natural growth of the country, as well as the new colonies and our amicable relations with Cuba, the building up of the navy and the shipping interests, all tend towards keeping the manufacturers of the country busy for years to come."

Cycles of Prosperity and Adversity.

John T. Stone, president Maryland Casualty Co., Baltimore, Md.: "It is axiomatic that prosperity and adversity run in cycles. They succeed each other with more or less regularity. The prosperous condition which we are at present enjoying has been with us for a longer period than prior experience would have led us to hope for. It is often said, in discussing this matter among business men at the present time, that because it has lasted longer and because it cannot last forever the end must be approaching and the period of adversity about to replace that of prosperity. This opinion certainly has back of it the teachings of the past. On the other hand, I believe most all observers of actual conditions are practically agreed that, search as we may, there does not seem to be any evidence in present or anticipated conditions to justify such forebodings. So far as the business of this company is concerned, there is nothing to indicate the proximity of dull times. Our business, particularly our liability insurance department, not only brings us into close touch with almost every class of industrial activity, but is most intimately dependent upon such activity. Our liability policies are based upon the payroll expenditure of our policy-holders. We therefore have a fairly good barometer of business conditions. If we find that the pay-rolls are decreasing, it necessarily means that the business of the policyholder is not so active as it was. Of course, the reverse is equally true. Now, the fact is that for several years and up to the present date a great many of our policy-holders have steadily increased their pay-roll expenditure, and I see, except in rare instances, no evidence of any change in that particular. My conclusions are, therefore, that while I cannot bring myself to believe that we are going to enjoy indefinitely the extraordinarily prosperous times with which we have been blessed during the past five or six years, and while I cannot get away from the impression that the longer these good times continue the nearer must be the approach of the evil times, yet I can see no indication of such a change in actual conditions, nor any real indication of its approach."

Unprecedented Railroad Traffic.

Charles Catlett, Staunton, Va.: "The following extract from the circular of the American Institute of Mining Engineers

is the strongest single evidence of our prosperity which has come to my notice, as the institute usually gets what it wants: "It is hereby announced with great regret that the meeting arranged for July next in British Columbia, with an excursion to Alaska, has been suddenly rendered impracticable by the withdrawal on the part of the Canadian and American railroads of assurances previously given as to cars for the proposed trip. The Pullman Company had been able to assure us of ample cars for one way, but could not provide the equipment for the return journey. The reason for this step is the unprecedented demand for cars for the regular traffic. Applications and negotiations in every possible quarter have resulted in the conviction that it is impossible to secure even one special train for the journey to British Columbia and back."

Measured by Millions for Construction.

Edgar S. Low, president of the Edgar S. Low Co., railway equipment, contractors' plant, etc., Pittsburgh, Pa.: "We see no possibility for there being any let-up in the building operations in our territory in the next several years. The boards of directors of the various railroad companies and steel companies centering in Pittsburgh have voted millions of dollars for betterment work, which it will take years to complete. This betterment work is being hampered on account of the manufacturers being unable to deliver machinery and material as rapidly as it is required. It occurs to us that it will take some years to get the raw material out of the ground, get it transported and get it to the condition of its final use. As the money has been guaranteed for all this betterment work, we do not see how there can be any falling off in the present prosperous conditions until at least we clean up our present contracts. As a matter of fact, we do not see any good reason why the present prosperous condition of the United States should not continue always, as this is certainly the leading producing country of the world. Nothing could possibly disturb our present commercial conditions except a war of considerable magnitude, and as there is no prospect of that, we think the 'calamity howlers' will have to take a 'back seat' and go out of business. There is certainly business enough in sight and money enough to handle it to keep everybody going for at least the next ten years to come, and a bridge that is ten years ahead is scarcely worth crossing."

Manufacturers Crowded with Orders.

The Banner Electric Co., Youngstown, Ohio: "We find that business in general was never more prosperous. The manufacturers in all lines are crowded with orders, and prices are good in nearly all cases, and when we consider the unparalleled prosperity of the country in general at this time, it does not seem possible that the future for at least many months can present anything but the most favorable outlook. As manufacturers we have found that our business has steadily increased during the past year in volume, and we are now arranging to largely increase our capacity in order to take care of the business which we feel sure we will secure in the future."

Decline in Business Only Comparative.

Columbus Machine Co., Columbus, Ohio: "We here are extremely busy, our product being sold for at least a month in advance, and the outlook for the balance of the year is of the best. We do not think there is quite so much business in big work, but all the small plants are busy and increasing their equipment. Things

do not appear to be so brisk now as they did a year ago, but the writer believes this to be merely a matter of comparison. Two years ago we were not prepared for the great rush of business that came to us, and naturally felt busier. Today we are prepared, having increased our facilities, and are in position to take care of a great deal of business without any strain. We do not look for any trouble about disposing of our output for at least another year."

Highest Confidence in the Future.

Chicago House Wrecking Co., Chicago, Ill.: "The condition of the machinery and iron lines is about on a par with what they were a year ago. There is no marked improvement, and yet we have the highest confidence in future business, and are sure the outlook is a very promising one."

Some Question About Prices.

W. H. Anderson & Sons, tools, supplies and equipments, Detroit, Mich.: "From our point of view the present demands throughout the country for articles manufactured from steel and iron will without doubt continue for the present year at least, but the opinion seems to be prevalent in this locality that the unprecedented demands cannot continue, and many manufacturers are not as enthusiastic in increasing the capacity of their plants to meet this present heavy demand as they were a few years ago. Personally, we are crowded to our utmost capacity, although it is but a little more than a year since we moved into our new building with double the capacity of the old one. At the present time our average sales for a period of six weeks amount to about the entire year's sales of ten years ago. In view of the large demands for goods, prices are not as high as the demands would warrant."

Cannot Catch Up with Contracts.

Perry Andrews & Bro., artisan and oil well contractors and drillers, Atlanta, Ga.: "The present business conditions are good, and the outlook for the future is bright for continual prosperity, under which this country has been for the past six years. We have been unable to get caught up with our contract work. And as an evidence of the great business prosperity of the whole country, we have only to look to the immense business done by the railroads in freight and passenger traffic. It is simply immense. The factories are rushed with orders. We have had an order in for two months, and have only just been able to get it filled. They write us that they are tremendously crowded with orders. We see nothing in the near future business outlook that can mar the wonderful business prosperity which this country has been enjoying for the past few years. We are sound believers in the 'Dingley tariff.' That, with the gold standard, we have no hesitation in stating, has brought this country the most wonderful prosperity it has ever enjoyed. If the tariff is changed it must be by its friends, not its enemies."

Insatiable Demand for New Machinery.

Engineering Company of America, New York: "It is our opinion that, broadly speaking, prosperous conditions will continue for some time. Our belief is based on the following reasons: The great industrial combinations that have been formed will have the tendency to steady prices and obtain more uniform profits. They will also be able to do what the independent manufacturers were unable to do, i. e., when the home consumption falls off they will enter the foreign markets with their surplus goods, and thus keep our labor well employed. The increase in wages we consider a favorable factor, as it gives the mass of the people more money

to spend, which means greater consumption and demand for products. The crop outlook is good, and at remunerative prices, which means more merchandise will be needed in the agricultural districts. The West is being rapidly settled and developed, and our trade with the Orient is growing satisfactorily. There is great mining activity throughout the West, and our production of gold, while not increasing as rapidly as might be desired, nevertheless shows no signs of falling off. While we believe we can hold our present position, we question the ability to continue the growth of the past six years. A certain amount of money, together with the credit based on that money, can do a certain amount of work. In other words, a certain quantity of money is requisite to do a certain volume of business. We have about reached the limit as to the work the money in this country can perform. To continue our growth we must increase our supply of money. It may be that our increasing exports, after further reducing our indebtedness abroad, will prove a favorable factor in this particular, especially when the South African gold mines get back to normal production. Our foreign relations are good. There is no rampant speculation taking place. The outlook for continued prosperity is more than confirmed in our own business of engineering, which brings us into direct contact with nearly all fields of enterprise. Not only are many new plants being contracted for, but also many old ones are being remodeled or wholly replaced by ones showing greater economy of operation and production. The result is that all this new and projected work primarily means continued business for certain manufacturers, and further, it shows the insatiable demand for new and improved machinery and methods, which, when installed, will place this country even further in advance of our foreign competitors than we now are. The combination of all these favorable conditions warrants the belief that we will for some time maintain our present prosperous conditions, with a better chance for further improvement than for retrogression for some time to come."

No Reason for Anything but Hope.

J. A. Fay & Egan Co., Cincinnati, Ohio: "Business conditions are indeed very favorable, and we see no reason why everyone should not enjoy the same prosperity as has been evident heretofore. In our special line of business the foreign trade, the Southern States and most parts of Canada we notice great prosperity, and at present see no sign of any let-up in business, and we predict a good year for 1903."

Have Started Full of Confidence.

E. F. Hartfelder, president Hartfelder-Garbutt Company, mill and railroad supplies, Savannah, Ga.: "We can cover all the questions that you ask by simply stating that we have just started in business with money we have earned and saved, and have decided to risk what we have. Having full confidence in the future, we see no evidence in this section of a tendency towards less activity in the industrial interests. The future prosperity of the South is only a question of energy and common sense. The wealth is here, and only requires development."

The Past No Guide for Prophecy.

Walter L. Clark, vice-president Niles-Bement-Pond Company, New York: "We see absolutely no indication of any slackening in the satisfactory business conditions which are now prevailing. On the contrary, we believe there are potent reasons for the continuation of this activity for a long time to come, and we believe this is the opinion of all those thoroughly posted on the subject. We are working

under conditions in this country which never existed before, and therefore it is not wise to predict the future from the past."

Caution About Investments.

Burton J. Ashley, Chicago, Ill.: "Replying to your favor of the 20th inst. to the Harmon S. Palmer Hollow Concrete Building Block Co. of Washington, D. C., will say that the writer has never known of such industrial activity, and for the immediate future the business outlook is par excellence. So long as the country does not again overestimate the extent to which investments can be carried, as it did in the early nineties, the business situation will remain safe. The business of our own company is simply overwhelming, with prospects of a tenfold increase within the next year. This is due to the increasing price of lumber and the decreasing cost of Portland cement, which creates a condition that invites the erection of buildings out of concrete."

No Shadow Across the Highway.

Clarence E. Clark, Augusta, Ga.: "While I am not, generally speaking, an optimist, as are most business men, I take pleasure in saying that favorable conditions of trade render bright the prospect. In my line, real estate, which is a veritable thermometer of trade, business has been more active and exhibited more life this spring than ordinarily. I can see no shadow across the commercial highway of the future portending horror, but am compelled to believe in continued prosperity."

Never Had as Many Orders.

Houston & Liggett, lumber dealers, Lewisburg, Tenn.: "We never had as many orders on file at this season, and the same condition seems to exist with other lumber dealers throughout the country, the only complaint being inability in securing cars sufficient to fill orders promptly, but it seems the railroads are placing orders for rolling stock sufficient to handle the increasing business, and the prospects for an unprecedented year of prosperity seems inevitable. We have recently purchased about 6000 acres of red cedar in Arkansas and 4500 acres in Texas, which will give employment in our line to quite a number of teams and men for the next several years."

No Feeling of Distrust.

Walter A. Zelnicker Supply Co., St. Louis, Mo.: "The outlook in our branch of business is for a continuation of the present reign of prosperity. The lull during the winter months was due to adverse weather conditions alone, and we do not think can be attributed to any lack of confidence on the part of producers in our territory. We find that inquiries for rails, railway equipment and all iron and steel products are very much on the increase, and believe that deliveries of such material for immediate use will soon command very high premiums. Our experience is that all producers of finished steel and iron products are very much behind, due to their almost forced cessation of operations in the last three months on account of the scarcity of equipment with which to move the finished product from the mills. Millmen in the South and West are very much hampered in moving lumber, due to inability to obtain rolling stock. This, together with their recent streak of very wet weather, has made them rather hard pressed for ready cash, but the demand for their product is as strong as ever, and we feel that there is no feeling of distrust among any of them."

Inclined to Be Optimistic.

L. Moulthrop, secretary and treasurer New Haven Manufacturing Co., New Haven, Conn.: "Our humble opinion is that the existing conditions and indica-

tions for future business, at least for the balance of the year, are as favorable as in the past. We should be greatly disappointed if the present activity and prosperity does not continue for months to come, and do not see any tendency towards unfavorable change relating to manufacturing interests. We are inclined to be optimistic, and although not looking for any particular change in prices, trust that business conditions will continue as at present, and believe they will. We are rushed with business and behind on our orders, and the difficulty is to secure a stock of finished machines for early delivery, the great call being for engine lathes and iron planers, and the inquiry is as strong as ever."

Passed the High-Water Mark.

Acorn Brass Manufacturing Co., Chicago, Ill.: "We believe prosperity has already passed its high-water mark, and is now in the ebb tide. As far as our observations extend, the business world is not as active as it was a year ago. We do not believe, however, that the conditions are in any way alarming. Neither do we agree with those pessimistic prophets, who, noticing the slight relapse, foretell of a financial crisis. As far as we see, no symptoms justify such a conclusion. On the other hand, we consider the small decrease in business activity a hopeful sign. Manufacturers understand that a flooded market brings business depression, and are fortifying against it. This we believe will do much to lengthen the reign of national prosperity. In our opinion, no great crisis is, under existing conditions, probable or possible for a number of years to come. The business world may not be as active as it has been during the past year, but it will still enjoy a remarkable degree of prosperity."

Troubled About Getting Deliveries.

The Garvin Machine Co., New York: "We are working on full complement of men; orders coming in fast enough to keep us sold out as fast as machines are finished. In our different salesrooms, which are located at Philadelphia, Pa., and Syracuse, N. Y., as well as here, we carry a large line of all kinds of machine tools, and we are only troubled in getting machines delivered as fast as sold. From the inquiries we get for machines, we do not see any indication of a falling off in business, and we feel that unless the workmen kill the goose that lays the eggs, we are bound to have good business for some time to come."

Never Knew of So Much Building.

Geo. A. Robinson, president Geo. A. Robinson Contracting Co., Inc., Mobile, Ala.: "We have never known the time when there was as much building in prospect or a time when the country seemed more prosperous. Our company has just opened up a general contracting and building business, and we have several contracts under way at this time. We have in our office today four sets of plans for buildings in and around Mobile, which will aggregate about \$250,000, and there are several other buildings which are now being worked up."

For Preservation of Individual Rights.

E. F. Du Brul, commissioner National Metal Trades' Association, Cincinnati, Ohio: "There is but one cloud on the business horizon, and that cloud is the unrestrained excesses of the labor unions. The unions seem to have been able to gain so much in the way of wages and hours and other conditions in the last two or three years that they are losing their heads. The leaders in many instances seem drunk with power, and, in my mind, unless manufacturers organize on conservative and firm lines, not to fight organized labor,

but to resist their encroachments, the situation is one that may be well looked into with apprehension. The resolution passed by the National Association of Manufacturers, looking toward the organization of employers on different lines, on the plan of this organization or something similar, is one that should not be allowed to rest without action. Individually, the manufacturers can do nothing; collectively, they are able to put themselves again on the same plane as their employees, and in such a way only can they preserve the rights of both the employers and employees, whether union or non-union."

Times to Be Even Better in the South.

E. E. Titus, founder and machinist, Petersburg, Va.: "I can't see where business is falling off. True, I have been slack for best part of this year. But things are picking up, and in other branches they are very busy. I think the prospects are good for a big summer and fall run of work. Prices do not fall very fast, and as long as prices stay up you can rest assured work will keep up. When the bottom drops out of iron, then look out. The railroads are all busy. Everything else is busy. And the April reports for the wheat crop, if carried out, will make this the banner year of the times. Hence that will be a big lift to the railroads. That is another sign of the times. When they are busy everything else is busy. At this time I see nothing to block the way, if labor will keep quiet, and I have every reason to believe it will. I believe also that times will be even better through the South. The towns and cities should be more liberal with manufacturers. Railroad rates could be shaved a great deal and then be high."

Well Supplied with Orders.

John B. Adams, president the Franklin Moore Company, carriage, tire and fancy bolts, Winsted, Conn.: "We do not feel that we are in a position to give you a very intelligent view beyond our own position. We are well supplied with orders for present and future delivery, and have been enjoying a nice trade for some time. From present indications we can see nothing to disturb the very prosperous conditions, and are looking for continued good business, unless some unforeseen disturbing element should arise."

Unable to Gauge Beyond the Year.

Henry R. Dalton, Jr., treasurer Chapman Valve Manufacturing Co., Indian Orchard, Mass.: "We consider the immediate business future to be in an extremely satisfactory condition. We are unable, however, to gauge what may come beyond the end of the year."

Prosperity for an Indefinite Period.

The Robbins & Myers Co., "The Standard" ceiling and desk fans, Springfield, Ohio: "Business conditions with us, and we believe, with most trades, are healthy, and indications for future business as we look at it are suggestive of an increase instead of a tendency toward a decrease in industrial interests. The length of increased activity in business conditions, however, is uncertain, but we are of the belief that prosperity is to continue for an indefinite length of time."

No Clouds on the Business Horizon.

The Russell Engine Co., Massillon, Ohio: "The conditions of trade are probably even more stable than they were a year ago. We note an absence of the 'high peaks,' but the average is satisfactory, and because of this fact we cannot help feeling a greater security in the continuance of present conditions. It may be that the requirements of the future are not anticipated so far in advance as in the recent past, but the steady inflow of new

business maintains a volume comparable favorably in its monthly average with the abundant years just preceding. We can see no clouds in our horizon, and are expecting a continuance of good trade."

Taxed to Utmost Capacity for Some Time to Come.

J. A. & W. Bird & Co., Boston, Mass.: "The outlook from the present conditions for active business in the United States is, we think, bright, and building seems to be very active in all parts of the country. If our own business is any criterion, the outlook is certainly exceptionally good, as our factory has been running night and day for the past three months, and although we are building a new plant, which will quadruple the present production of our Flintkote roofing, the prospect is that we shall be taxed to our capacity for some time to come, owing to the large contracts on hand extending over the coming year. The principal danger to the prosperity of the country would seem to lie in the overcapitalization of many of the companies which have recently been formed, and the unreasonable demands of labor and the consequent tying up by strikes of different industries throughout the United States. We see no reason on the whole, however, why the present conditions should not continue at least through the coming year."

Enlargement of Industrial Plants.

Herschell, Spillman & Co., improved riding galleries, North Tonawanda, N. Y.: "We have already entered more orders on our books during the present season than were entered up to the 20th of June last year, and orders are still coming in very freely. From all conversations that we have had with representatives of different houses, we have every reason to believe that the same is true in almost, if not every line of business. We also judge this from the fact that the large majority of those who buy merry-go-rounds of us on the instalment plan meet their payments within the four months, and so secure the rebate which we allow purchasers who pay within that time. We also judge this from the fact that many large concerns are investigating the merits of Niagara Falls power, and are moving into this section and building much larger plants than the ones which they left at other points. It looks to us now as though the United States had just started in to secure a large export business, with every reasonable prospect that we shall secure the large percentage of it within a very few years. This export business, added to our domestic trade, is certain to keep the 'wheels turning' for a good many years, and we believe that all manufacturers and jobbers have confidence in the continuation of the present good times."

No Diminution in Size or Number of Orders.

J. L. Weeks, treasurer and general manager American Steam Gauge & Valve Manufacturing Co., Boston, Mass.: "Up to date we have seen no diminution in the number or size of orders, and our customers seem to be ordering farther in advance than they have for some time past. This is particularly true of our domestic trade, and from the nature of the orders we receive we cannot see where there is any chance for any decrease in business during the balance of this year, at least. Among our export orders we find there is a large increase not only in the size of the orders, but the number of them. We have doubled our capacity, and are still from three to five months behind our orders, as we have been for the past year. We understand, from our interviews with other manufacturers in our same line, that the same satisfactory conditions prevail with them."

Believes in "Sawing Wood" Vigorously.

The Sandy Hill Iron and Brass Works, Sandy Hill, N. Y.: "We see no abatement in the excellent business of the past few years, and no suggestion of same. Wiseacres may say that our present speed will certainly end in the ditch. This may be so, but we know of no human mind that can tell us when this catastrophe will happen. It therefore behooves the business man to keep on 'sawing wood' for all he is worth while the day lasts. We know up here that a pile of wood is a 'good thing to have in the country.'"

To Be a Better Year Than the Last.

The Case Manufacturing Co., Columbus, Ohio: "We have no reasons to believe that there will be any cessation whatever in business activity for the ensuing year; in fact, we are anticipating a much better business in the mill-machinery line than we have had for some time, and we have every reason to believe that our crane business will not suffer. We are now well equipped with orders, and are receiving daily good reliable inquiries which in time will mean business. Our opinion in general is that the business this year will be equal, if not better than the one through which we have just passed."

Menace in the Unrest of Labor.

F. Fosdick, president Fitchburg Steam Engine Co., Fitchburg, Mass.: "On general principles we believe business was never in a healthier condition than it is now, nor that the outlook was better for the future, with the single exception of the great unrest in the labor market, and in this direction we have grave doubts as to whether it will not be for the bringing, much sooner than it would otherwise come, of a crisis which would for some time destroy the unparalleled prosperity the country is now enjoying. We believe it to be true that while industrial concerns are earning good dividends, averaging up the years of absolute loss, labor is receiving such pay as to enable it to purchase more than it has ever purchased before with the same hours of work. We are hoping that this unrest may come to an end, and that we may have several more years of prosperity for employer and employee."

Affected Only by Local Conditions.

T. W. Dunk, president Florida Electric Co., Jacksonville, Fla.: "Florida is situated somewhat differently from most of the States, and our experience in the past has been that we have been very little affected either by hard times or prosperity in the North. Our prosperity here depends mostly upon local conditions, and we feel that the outlook is very bright for the continued advancement of business in general in this State. This applies especially to the case of manufacturing and power plants, as Northern capital is being invested in this State to a greater extent every day."

Tremendous Demand for Building Material.

D. Van Smith, treasurer Southeastern Lime & Cement Co., Charleston, S. C.: "It looks to the writer as if there will be no let-up to the prosperous condition of this Southern territory. The tremendous demand for building material is surely the best evidence of a healthy condition of affairs. Dating back from the early spring of 1901 especially, there has been such a tremendous demand for all classes of building material that no one in the business has been able to keep up with it or meet the requirements of their patrons. We see no reason but that this condition should continue for some time; we hope for years to come. We have no doubt but that every firm in the 'building-supply'

business in the South has more than it can do. The high prices of all building material seems to have no effect upon the heavy demand. We have utmost confidence in the future prosperity of this Southern country."

Customers Are in a Hurry.

Brown & Sharpe Manufacturing Co., machinery and tools, Providence, R. I.: "Judging from what we are able to learn from the points of buyers and from our own condition at the works, it looks to us as though the future business of the country promised an activity equal to what we have been having of late. Inquiries are very numerous, and a large percentage of them are followed by orders. The greatest difficulty seems to be ability to manufacture the product fast enough to supply the demands of the customers, which in many cases are very urgent. We see no immediate tendency toward a less activity in industrial interests."

Should Be No Decided Lowering of Prices.

May & Spaulding, railway equipment, Atlanta, Ga.: "We see no reason why there should be any less activity in our line of business than at the present time. While we know of nothing to indicate higher prices, we think that the present state of prices is on a firm basis, and for this reason there should be no decided lowering of prices."

If Labor and Capital May Agree.

A. H. Vandenberg, manager the Waggoner Watchman Clock Co., Grand Rapids, Mich.: "All indications point to a universal and unlimited prosperity for the future if labor and capital may amiably adjust their present differences. Accounts are freely made and freely paid, and we anticipate in our business a continuation of this general prosperity."

Never Had a Better Outlook.

Olds Motor Works, Lansing, Mich.: "All indications, so far as we are able to judge, point to a remarkably prosperous condition at the present time. Our engines are sold in every State in the Union, and since they are required for furnishing power to the enormous industries throughout the country, our trade on them would be a pretty fair indication of the condition of such industries, and we are at the present time enjoying a larger demand for our engines from all parts of the country than we have ever experienced before. The unprecedented demand also for our Oldsmobiles indicates general prosperity among all classes of people, as many of these machines are sold to people for pleasure. Their purchasing of the same indicates a prosperous financial condition not only existing at present, but with good prospects for the future. So far as we know, all other industries are enjoying equal prosperity with ourselves, which indicates that the country was never in a better and more prosperous condition than at present, and never had a better outlook."

May Be a Falling Off.

Baldwin, Tuthill & Bolton, manufacturers of machinery, Grand Rapids, Mich.: "We see no occasion to anticipate any lessening of business activity during the present year, and for ourselves can say that we are receiving a larger volume of business than during the corresponding period of 1902, which was a record-breaker, so far as volume is concerned, to the extent of 36 per cent. However, we have a feeling that the supply must presently catch up with the demand, and that there will be presently a falling off in volume in many lines of business, unless it is possible to get in touch with new resources of trade. Our own manufacture being confined to saw and knife-fitting machinery, brings us in touch prin-

cipally with the saw-mill or woodworking plant operators throughout this country and abroad, and our business is naturally a reflection of the activity in these trades, but we find it easier to develop our business abroad than in this country, and are at present furnishing equipment to some twenty-five foreign countries, and hope to be able to materially increase this volume, so that even if business does become depressed in the United States we may still be able to hold our own."

Manufacturers Behind on Orders.

Thomas F. Davis, secretary and treasurer Carolina Fire-Brick Co., Killian, S. C.: "Business has never been better with us, having more orders on hand than we can fill, and we are so fully satisfied as to the future that we are now installing increased plant to more than treble our last year's output. As an indication that business along other lines is equally prosperous, we can cite the fact that we are unable to obtain the delivery of our machinery and the rails for our railroad under eight to ten weeks, the manufacturers being this far behind their orders. We have found, however, that the fire-brick business is a fairly good barometer of business conditions among manufacturers, for the reason that the more work these plants do the greater quantity of our material they need."

Confident of Continued Success.

Ed. L. Humphreys, vice-president Southern Saw Works, Atlanta, Ga.: "Business conditions with us are very flattering, and have been for the past year. So confident are we of continued success that we have made many extensive improvements in our plant, and contemplate further additions. We note that there is great activity in the lumber industries, and we feel that there is a strong possibility of a continuation of same under similar conditions."

The Outlook Never Was Better.

Sabel Bros., jobbers in hides, wool, etc., Jacksonville, Fla.: "The present business outlook throughout the State of Florida was never better in the lumber, turpentine and phosphate plants and mills. There is no evidence whatever of a tendency to less activity, but, on the other hand, we look forward to a continuation of the great activity and prosperity."

Looking for Increased Activity.

Hugh S. Morrison, mechanical engineer, Richmond, Va.: "Locally the outlook for continued building and engineering activity is very good, and the present year here will doubtless see increased industrial activity over last year."

Running Overtime to Fill Orders.

Philip M. Maloney, treasurer the North Penn Iron Co., North Penn Junction, Philadelphia, Pa.: "Our main and branch offices indicate no abatement in the demand for cranes for the next six months or a year. No plant is considered complete nowadays without this class of equipment, and a demand for cranes should therefore form an authentic barometer for future trade conditions. We are running overtime to fill orders, and believe we shall be obliged to continue to do so for some considerable length of time."

Deplores Possibility of Labor Troubles.

John Dick, treasurer and general manager Phoenix Iron Works Co., Meadville, Pa.: "The outlook for business for the year 1903 is very promising, as there are a great many orders being placed and a great many inquiries, and, as far as we know, everyone is very busy. The only disturbing feature at the present time is the condition of the labor market, but we trust that it is not going to be troublesome, although the tendency of the labor

organizations seems to be in the direction of restricting production and making unreasonable demands in regard to the price of labor. So far as we are concerned, we are disposed to treat our employees liberally, and endeavor to merit their confidence, and we cannot but deplore a condition that is liable to put the employees in a position that is to their own detriment, as well as antagonistic to the manufacturer. There should be a mutuality of interest, and we have every confidence that the more intelligent operatives will so regard it, and will be able to influence these movements in the right direction."

In Building and Machinery Lines.

H. M. Davis, advertising manager Sprague Electric Co., New York city: "The Sprague Electric Co. is doing a larger business than ever before, and the indications are that the future business will be even larger than at present. The business conditions throughout the country indicate a continuance of the present prosperity, and especially in the building and machinery lines there is every indication for a large demand for interior conduits and the application of electric power to all classes of machine operation."

Busy in Every Department.

C. F. Lunkenheimer, treasurer the Lunkenheimer Company, superior brass and iron steam specialties, Cincinnati, Ohio: "We are exceedingly busy in every department, and are again compelled to increase our facilities in order to keep pace with the growing demand for our various specialties. We have every reason to believe that the present conditions will prevail for some time to come, and can see no evidence of a tendency towards less activity in industrial interests."

Prefers Being an Optimist.

E. M. Dart, president and manager E. M. Dart Manufacturing Co., Providence, R. I.: "Our business affairs at the present indicate great activity, and with a bright present that permeates the vast industries of this country. We are inclined to look upon the future as promising continuance for a long time; we prefer being an optimist."

Enlargement of Foundries.

H. F. Frohman, general manager the S. Ohermayer Company, Cincinnati, Ohio: "While the year 1902 was the largest business ever done by this firm, the year 1903 starting in for the first four months has far exceeded our last year's record. We believe that the outlook is equally as good as it has been, and the iron industry will continue in its present state for some time to come. The foundries throughout the country are still enlarging, and those who have been negligent in putting in new machinery and labor-saving devices are now making these changes, and will continue to do so for some time to come. Our company is likewise doing the same, enlarging its plants and putting in modern and new machinery. We believe if these labor differences can be satisfactorily arranged that prosperity will continue as it has for the past few years."

Unchanged from Last Year.

O. P. McCabe, secretary the Stilwell-Bierce & Smith-Vaile Co., Dayton, Ohio: "There is no perceptible decrease in our business over the first quarter in last year; in other words, the outlook for business in our line is unchanged and practically the same as last year, when we did the largest business in the history of the company. Our prospects are exceedingly bright, and we can see no reason for any falling off in the immediate future."

Unsettled Labor Conditions a Detriment.

H. K. Gilbert, president Railway Appliances Co., Chicago, Ill.: "We see no

indications of reaction of the present conditions at the present time. The chief dangers in the future, to our mind, lie in the possibility of failure of one or more of our important crops, the antiquated currency laws under which we now do business, and the unsettled labor conditions which have undoubtedly deterred a good many enterprises from developing as they might reasonably have been expected to do."

The Presidential Elections.

Maurice E. Davis, general manager Apex Equipment Co., New York: "It is a personal hope, and not without foundation. I believe, that the coming presidential year will be an exception to the usual state of business, inasmuch as we believe that the tide of prosperity will not have retreated to a low mark until the election of a new President has become a thing of the past, when, if a favorable election has occurred, we portend a continuance of prosperity, if not at so high a tide as now, at least we believe conditions will be good for two or three years."

Pushing Ahead into Business.

Charles Efron Company, electric railway contractors, Bayonne City, N. J.: "Our concern has just been organized, but we are pushing ahead into the business, and we think the existing conditions and indications seemingly are suggestive of a great activity in all lines of business. Inquiries for railroad material, mining and industrial material of all kinds continues. As far as we are able to determine, we do not see a lessening activity in these lines."

Unable to Keep Up with Orders.

Wm. L. Rodgers, secretary the Fernholtz Brick Machinery Co., St. Louis, Mo.: "The outlook for future business in our line is very flattering. We have been unable to keep up with our orders, and find that this condition exists with most all manufacturers in this section, and it is our belief that the country will enjoy the greatest activity and prosperity in 1903 that it has ever known."

Industrial Disturbance the Only Cloud.

Wm. E. Hill & Co., saw-mill machinery, Kalamazoo, Mich.: "Unless something unforeseen happens in the near future to change the aspect of things materially, we think that the present activity of general prosperity which the country has enjoyed will continue for several years to come. The fact that all the great railroad companies are planning the expenditure of immense sums of money for improvements, that the iron and steel mills are sold ahead for two or three years, and that our export business is developing as never before, are all indications that the good times will continue. As we see it, the only cloud in the sky is the liability that organized labor will precipitate a conflict which will tie up the great industries of the country and throw us back where we were ten years ago."

Indebted to Southern Railroads.

The Schwarz System Brick Co., New York: "The degree of prosperity can best be measured by the building activity of a people. The axiom holds good for all alike, for entire communities, as well as for individual. The magnificent palaces and cathedrals of Venice owe their existence to a period when the prosperity of that republic was at its height, and the judicious man of today is not apt to tear down the old homestead and to build a new and better one when the approach of hard times is in the air. When the people are eager to build the building trades have their hands full to furnish the material; they are the first to feel the symptoms of coming distress, and the last to recover. The demand for building materials of all kinds at the present time is

enormous, and, judging from the fact that new brick plants and new Portland cement factories are in the course of erection in all parts of the country, it is only logical to say that the existing plants are unable to produce the required supply, and judging from our own experience, although we are only established since a few months, it is safe to assume that money is plentiful and that our clients see ample time before them in which to earn the returns on the investment. We will not omit, however, to state that most of our success so far is due to the building activity of the South, and that we are especially indebted to the railroads of that section of the Union, which, filled with a true spirit of modern railroad management to promote the interests of the country, together with their own, have liberally offered us their co-operation in establishing the sand-lime brick industry. As a resume of the foregoing we can state, without being in the least optimistic, that we have all reasons to be satisfied with the present state of affairs in this great country, and that we look into the future with confidence and good cheer."

Increase to Come with Summer.

Julien Binford, Jr., secretary Tower-Binford Electric & Manufacturing Co., Richmond, Va.: "Although business was a little dull for the months of February and March, it has now resumed the prosperous condition displayed before this time, and we are looking for a large increase of business for the summer months."

Cheerful at Home and Abroad.

Chicago Pneumatic Tool Co., Chicago, Ill.: "The outlook in the pneumatic-tool line is indeed encouraging from our standpoint. Orders for pneumatic appliances of every description continue to pour in from almost every portion of the civilized world, and the facilities of our various factories are taxed to their utmost in order to adequately fulfill requirements. The recent litigation in which we have been engaged against users of tools infringing on our Moffett patent has materially aided to effect this result, and in this connection the most noticeable result has been in the increased number of exclusive contracts which we have secured, giving us the right to supply all the pneumatic equipment required by several of the leading railroads and manufacturing establishments for a period of one or two years as stipulated. Our foreign offices report a correspondingly cheerful outlook, and state that the pneumatic-tool prospects have never appeared brighter."

Contracts Back an Opinion.

The Triumph Electric Co., Cincinnati, Ohio: "For our own particular business, the outlook for the future is extremely promising, and this is the same report that we have from various other manufacturers. Not only do we make this assertion from the number of inquiries that we have, but from the contracts that we have booked at this time; in fact, we now have orders far in excess of any that we have ever had at this time of the year; in fact, at any time during our business career."

Expansion of Trade May Not Continue.

E. M. Freese & Co., brick, tile and terra-cotta machinery, Galion, Ohio: "In most lines of trade and manufacture the activity of the past two or three years is fully maintained. There seems to be a few exceptions, however, and this, together with the considerable decline in the market price of industrial and railway stocks which has taken place during the past few months, would seem to us an indication that the extreme activity of recent years may not be maintained during the year to come. The expansion of

trade has been great, and it appears to us unlikely that it can continue at the same pace indefinitely. The fact that there exists a more or less general belief that a reaction will be due in the near future would, in our opinion, tend to lessen confidence when slight signs of such reaction can be noted, thus tending to accelerate the decline."

Cannot Supply Skilled Help Enough.

The Coe Manufacturing Co., veneer-cutting machinery, Painesville, Ohio: "In our line of manufacturing veneer-cutting and drying machinery we can see no tendency whatever for any let-up in the progress of this line of industry. We have all the business we can conveniently handle with our present facilities, and are rushed to our utmost capacity at all times; in fact, we cannot employ skilled help enough to turn out a product in volume and as to time of delivery to meet the requirements of our trade."

Regrets Excessively High Cost of Living.

Thos. Forman, manager Thomas Forman Co., Ltd., Detroit, Mich.: "We believe that the year 1903 will be fully equal to 1902 in the matter of consumption of material, as the contracts now under way are of such enormous volume that we feel justified in this opinion. It is very questionable in our minds as to the matter of profit on this year's business, as in some lines production has overtaken consumption, which may result in broken prices before the year closes. From the standpoint of our own specialty, this being maple and oak flooring, will state that the outlook for consumption is especially bright, as the building of the cotton mills through the South and repairs and enlarging of manufacturing plants throughout the North, as well as the building of residences and office buildings, is well under way and assured for the year. We regret exceedingly to note the excessively high cost of living, and also to note the meanness of labor and labor leaders. To be just, we must, of course, acknowledge that labor must necessarily have much higher wages than in the past, in consequence of the excessive cost of living. We fear, however, that this is the element that will cause finally an end of our present great prosperity, for when business ventures become unprofitable capital always retires. We have great faith to believe that our present activity in all lines of business will continue until a year from next August, when there will certainly be a settling of all values, and at least a temporary cessation of business activity. We do not feel that this would in any way be unwholesome or detrimental to the general interests of the country from a broad standpoint."

Danger in Extreme Optimism.

James Inglis, treasurer and manager American Blower Co., Detroit, Mich.: "Unless something entirely unforeseen occurs, 1903 will be by far the most prosperous we have yet experienced. The greatest danger is such extreme optimism as is indicated by the above. It remains for you and the press generally to preach conservatism, so as to avoid excesses which lead to disaster."

On a Good Run of Business.

The Skinner Chuck Co., New Britain, Conn.: "Business in this vicinity is very good. There have been few interruptions by strikes or lockouts. Wage-earners are well paid, and are generally contented, doing good service. Nearly all of our larger manufacturing establishments have been adding to their plants and preparing for increased business; some of them have orders for some months ahead. Nearly all have had a good run of business for the past year."

Prosperity Depends Upon the People.

Milwaukee Rice Machinery Co., Milwaukee, Wis.: "So far as we can see in our district, there is nothing to indicate a change in the present conditions. We think the future prosperity depends on whether or not the people desire it. If everyone would look forward to prosperous times and work on that basis, we do not see why we could not continue to have prosperous times, for we do not think yet the markets of the world have been glutted. In our own line as manufacturers of gasoline engines, we are receiving inquiries from India and New Zealand. There is still plenty of market in America, and as much or more abroad. If American manufacturers keep hustling the prosperity will continue."

Looking for the Best Year in Trade.

American Steam Pump Co., Battle Creek, Mich.: "The existing conditions and indications for future business, we believe, promise that 1903 will be the best year in the history of American trade, both at home and abroad. With the enormous wheat and corn crop of 1902, and every mine and factory in this country working to its limit to fill orders in hand way into the fall, we cannot see any evidence of a tendency toward less activity in industrial interests. So long as iron and steel hold their own and find a ready market and the balance of trade is in our favor, as it promises this year to be \$400,000,000, we believe the position of American manufacturers is stronger than ever before in the past five years. There is no precedent to go by to predict disaster, as the business of this country for the past five or six years stands by itself as having been done with the world, whereas heretofore we were doing business with each other."

Compelled to Enlarge Continually.

Charter Gas Engine Co., Sterling, Ill.: "Our present conditions are very favorable, and have been for a long time past, so that we have been compelled to enlarge continually, and will do so again this year. This latter statement indicates what our view is of the future, and we see no reason why there should not be a continuation for at least another year of the good times that have been enjoyed by us and the country at large."

Working Night and Day.

A. G. Holmes, secretary and manager Pittsburg Meter Co., East Pittsburg, Pa.: "Our works have been operated day and night for the past three years, and the outlook for the future has never been better. The natural-gas business, which a few years ago seemed to have been on the decline, on the contrary has been and is greatly on the increase. At the time natural gas was first discovered it was the general opinion that the supply was inexhaustible, and it became the custom of gas companies to supply both domestic and factory consumers at a lump sum, which was based on the cubic feet of space in a room for domestic consumption, and usually per ton of output or other unit for factories, but in later years it has become such a valuable fuel, not only on account of its heating power and convenience, but because in many kinds of manufactured product it produces an article so much superior to that produced by coal, that it is now practically an obsolete method to sell it by contract, and in practically all fields it is metered in the same manner as artificial gas has always been, but with meters that are designed and made to withstand higher pressures. The same argument holds good in the distribution and sale of water, and the cities of the United States are coming to the realization that it is to the benefit of the consumers to meter water in place of selling

it by the flat rate, some of the reasons given being that it puts all consumers on the same basis, lessens the cost to the consumer, and makes it possible to supply a quality of water far superior to that supplied by the flat-rate system. The latter reason is accounted for from the fact that very much less water must be supplied, and secondly, it is possible to either filter it or obtain it from a source which might supply enough water for a proper consumption per capita, but not enough if it was sold by flat rate and each consumer waste about four times more than he ordinarily required if properly used. These changes are responsible for the continued activity in our line of business, and as good business in one branch undoubtedly affects other branches, we believe there will be a continuance of the present business prosperity."

Best Year in Twenty.

John C. Higgins, mill picks, Chicago, Ill.: "Existing conditions in the mill-pick line are very gratifying. I have experienced the best year that I have had for over twenty years. Unless something very unexpected happens, I look for a very prosperous and busy year."

Promise in Good Crops.

The Miller Oil & Supply Co., Indianapolis, Ind.: "There is growing today one of the most promising wheat crops the country ever raised. With good prices for lumber, grain of all kinds, cattle, pork, sheep, etc., there is certainly every indication for continued business prosperity. The great activity in industrial interests is likely to continue for several years."

Tendency Toward Less Activity.

Mengel's Machinery Exchange, Baltimore, Md.: "We think the most pressing and serious hindrance to a greater activity in the manufacturing interests at the present time is the unsatisfactory, restless situation in labor circles and high prices demanded in certain lines of material not warranted, conservative employers and manufacturers feeling they will not be able to meet the demands of mechanics as to wages and hours, and that prices of material in some cases are very much too high. We think there is a tendency towards less activity in industrial interests. Our opinion is that we need extraordinary good times to justify prices now ruling, and there is bound to be a reaction. In agricultural products, if the demand and crops keep good, it will always help to cover up in a general way evidences of a less activity in manufacturing."

Many New Steam Plants Rising.

H. G. Crafts, manager the Reliance Gauge Column Co., Cleveland, Ohio: "Up to the present time we have not experienced any falling off in the very satisfactory business we have enjoyed for the past year or more, nor do we see any indications of any immediate diminution of our business. There seems to be a large number of new steam plants going in all over the country. Manufacturers from whom we buy material are crowded with orders, so that we have to place our orders ahead as far as possible to insure ourselves against running short. However, both material and labor show a rising tendency, which, if continued, we think may prove a check to a promotion of new enterprises and the establishment and enlargement of manufacturing plants and buildings."

High-Grade Machinery in Demand.

Allis-Chalmers Company, Chicago, Ill.: "The volume of business on the books of the company today far exceeds that of any time since the organization of the company, notwithstanding the fact that the output of the plants has been increased to a large extent. We can see no

abatement of prosperity in our various branches of manufacture. There seems to be an unlimited demand for all kinds of high-grade machinery, which is certainly a good indication that prosperity is enjoyed in all lines of manufacture."

Unwise Leadership of Labor.

E. H. Mumford, secretary and treasurer the Tabor Manufacturing Co., Philadelphia, Pa.: "Our orders for molding machines are as good at the moment as at any time in the past, and the first three months' business shows an increase over last year of about 40 per cent. in the same time. We believe the only possible check to our industrial prosperity to be what is called the 'minority control' of labor-union activity. This control is so often vested in the hands of unwise and irresponsible leadership that the conservative majority of the union does not exert the control it should."

Quick Sales for Cash.

H. G. Barr, Worcester, Mass.: "Present conditions, while most excellent, seem on a solid basis. Cash payments prevail, and quick sales by agents are the rule. Foreign trade send representatives here to solicit agencies. Changes come suddenly from unexpected quarters, but the present outlook is better than one year ago."

For Better Understanding Between Labor and Capital.

E. Bertram Pike, secretary and treasurer the Pike Manufacturing Co., Pike Station, N. H.: "Our sales for the past three months have exceeded those for the corresponding months of last year, and orders were never coming in more freely at this season of the year than at present. The phenomenally favorable crop reports would indicate a large buying power on the part of our farmers, especially in the Northwest, which would seem to insure another year of good sales in agricultural implements and those goods which are used in agricultural sections. We believe that the tendency toward overspeculation has received a salutary check, which we trust has come in time to prevent such overinflation as would result in long-continued depression. The only menace to our present prosperous industrial conditions is the labor question. How long our manufacturing interests can continue to operate under repeated advances in wages and the losses imposed by repeated strikes is a question. We most earnestly hope, and, being optimistic, are inclined to believe that the serious consideration this subject is receiving on the part of employers throughout the entire country will result in a better understanding between labor and capital before it shall be too late."

Unreasonable Demands of Union.

Geo. D. Selden, president Erie City Iron Works, Erie, Pa.: "So far as our experience goes and we are able to judge, the volume of business is fully equal to a year ago, and we would feel assured of another year's good business but for the unfortunate conditions existing in the labor world. The unjust and unreasonable demands of the labor unions are handicapping us to so serious an extent that we are fully convinced that if it continues we shall drop back in our position in the business world, and that we shall be so seriously handicapped by the curtailment of our output and the increased demands for wages that we look with serious doubts on our ability to hold present conditions. We see nothing on the horizon that would suggest any lessening of industrial activity but for this unfortunate condition existing. We hope that the leaders of labor will appreciate and realize the seriousness of this action on their part, and that they will, before it is too late, cease to

hamper business activity by these unreasonable demands."

No Evidence of Industrial Decline.

Henry W. Thomson, real estate, etc., Spartanburg, S. C.: "For the past several months the demand for Southern industrial securities has been most satisfactory to me. From the volume of inquiries and the amount of sales made I can see no evidence of less active industrial interest. I believe that we are just beginning to be appreciated, and the great activity and prosperity which this section is now enjoying will continue for some years."

May Make New Iron and Steel Records.

H. T. Wallace, president the Diamond State Steel Co., Wilmington, Del.: "General conditions seem to be favorable to a very large business being done in steel and iron lines during the balance of this year. It is quite probable that 1903 may make new records in this direction. At the same time, there are evidences that values are assuming a more normal condition, particularly in the line of raw materials, which should have the effect of prolonging the period of our prosperity."

Activity in All Sections.

G. F. Covell, sales manager Voorhees Rubber Manufacturing Co., Jersey City, N. J.: "Judging from our own business, there are no signs of either less activity or of a tendency towards that point. The demand for our products seems to increase steadily. We are much behind in filling orders already booked, though running our works day and night much of the time, and new orders continue to come in steadily. Our business is domestic, reaching from the Atlantic to the Pacific, and from the Lakes to the Gulf. No one section shows less activity than the other, the demand being great and insistent from all parts of the country. Judging from this, you can readily understand that we could hardly be expected to answer your question except in one way. We have all of us been expecting a gradual diminution in demand, because it seemed impossible, in the light of past experience, that such prosperity could continue so long without at least slight interruption, yet present demand seems to show no deterioration, and except for possible labor troubles or recklessness growing out of prosperity, we can see no evidence towards less activity at this time."

The Barometer of Trade Is Good.

John A. Walker, vice-president and treasurer Joseph Dixon Crucible Co., Jersey City, N. J.: "The Dixon Company's industry is quite an accurate barometer of trade weather, so to speak. With lead pencils we interest every man, woman and child; with crucibles, every man in the metal-melting business; with graphite for lubricating, every firm that runs machinery; with paint, all the building community; with stove polish, all the housekeepers, and from our standpoint we are having good trade weather, and the barometer points steadily and persistently toward the good. There are, for instance, 900,000 immigrants coming into the United States every year now. Figuring five to a family, this means 180,000 families, and this means the building of 180,000 new houses just for this one new feature of the case every year, and all the incidents belonging to the setting up of 180,000 new houses, just in this one matter alone. The business pulses with us throb good, the demand is steady, and for staple goods we find that the better we make our wares and the more perfect our standard of excellence, the easier it is to sell them. It seems to us that there is at present no very serious cloud on the industrial horizon."

Strikes May Tie Up Business.

J. D. Mallory, machinery, tools and supplies, Baltimore, Md.: "I consider the present indications most encouraging, believing this should be even a better year than the last one. The tendency of prices for all manufactured material in my line is upward. This is usually a good indication for business holding on strong. Provided business does not get tied up with labor strikes, which is likely to happen at any time, I think the chances for a continuation of the present activity to be very good. I do not find that there has yet appeared any tendency towards decline."

Profitable Employment for Willing Worker.

E. E. Strong, president the Strong, Carlisle & Hammond Co., supplies, tools and machinery, Cleveland, Ohio: "We were never so busy as we are now. The past three months are far ahead of the corresponding three months of any year in the past. All indications here and within a reasonable radius of here seem to indicate continued activity and prosperity. We can see nothing in the future which does not point that way for at least another year to come. We see nothing which indicates anything different beyond that, but we do not feel that it is easy to see much more than one year in advance. Everyone here who is willing to work is profitable employed, and one of our greatest difficulties is to obtain intelligent help."

Shortage of Railroad Cars a Drawback.

A. F. Huston, president Lukens Iron & Steel Co., Coatesville, Pa.: "From all we can see at present, this year is going to be a very active one, and perhaps show as large if not larger amount of business done than any in the past. We, as well as other manufacturers, are equipped for turning out a much larger product, and whether all can be kept going to their full capacity some months later remains to be seen. The general business conditions are good, and while Wall street is overcharged with unmarketed securities, this need not cause any apprehension of business trouble. The railroads are the great consumers of the country, using 40 per cent. of the iron and steel products consumed, and they certainly are quite as busy as they have ever been at any time, with orders placed for cars and equipment generally way ahead. Shortage of cars still continues, so that we have been unable to ship gas coal from the mines which we own in West Virginia to any great extent, certainly not up to half our capacity there, and as a result have to purchase in the open market wherever we can get it to best advantage gas coal to keep our works going here."

The Labor Situation the Only Cloud.

The Brown Hoisting Machinery Co., New York: "Our business during the first quarter of this year has been very good; in fact, as good as in any similar quarter of the past few years, and the indications are that this condition will continue for some time to come. The only cloud the writer can see is the labor situation."

Trying to Catch Up with Orders.

The Watson-Stillman Company, New York: "Notwithstanding the fact that we have been running our plant day and night for two years, we seem to be a little further behind on our orders now than ever. There is no evidence in sight of any reduction in future business, and it would seem that prosperity has come to stay for at least some time to come."

Hoping in Labor's Good Judgment.

W. R. Anderson, secretary Buckeye Iron and Brass Works, Dayton, Ohio: "We believe that business will be equally as good this year as it was last year, pro-

vided we are not disturbed by labor organizations. We hope, however, they will exercise their good judgment and not crush existing prosperous times."

Warning from Fable.

Henry McElroy, treasurer and manager Wrightsville Hardware Co., Wrightsville, Pa.: "The present business conditions will continue for the balance of this year, provided it is not too harshly dealt with by labor disturbances and agitators. We find our order-books still very full; in fact, sufficient to keep us running full for the balance of the year, but we fear that the continued increase of costs on all finished products will sooner or later have its deadly effects and entirely murder the goose that lays the golden egg; in fact, we can see nothing else in the business horizon to disturb this period of prosperity except the continued and increasing demands of organized labor, and the continued granting of both the just and unjust demands will necessarily increase costs of production to such an extent that consumption will decrease until collapse will follow as surely as day follows night. From every other outlook business is promising and healthy, and we trust the agitators will sooner or later see the handwriting on the wall and let us keep on with our general prosperity for all, employer and employee alike."

Good Crops and the Iron Trade.

Caine & Plitt, iron and steel by-products, Philadelphia, Pa.: "We believe there will be a continuation of the present prosperity and great activity in the iron trade, principally owing to the prospect of excessively large crops. We have always found that the year of large crops is usually a good year for the iron and steel business."

Still Enlarging Its Plant.

Henry Vogt Machine Co., Louisville, Ky.: "Every indication is suggestive of even greater activity and prosperity. Last winter we moved into our new plant (three times the size of the old one), and are now making a large addition to our foundry and boiler departments. We have had to work at night to keep up with the rush of orders, most of the increased business being for our absorption ice and refrigerating machines."

For a Splendid Spring and Summer Trade.

Southern Cypress Lumber Selling Co., Limited, New Orleans, La.: "With us business has been better this year than for the corresponding period of any previous year. Prices are very firm, and the demand is excellent. The prospects are very good for future business; in fact, if we had more dry lumber on hand we could get a great deal more business. With us conditions were never better, and we see nothing to interfere with a splendid spring and summer trade, and if the fall crops are good we will have a good fall trade, and if these conditions prevail this will undoubtedly be the best year that the manufacturers of cypress have ever had, both as to volume and prices."

Have a Great Many Orders.

Wm. C. Codd, vice-president E. J. Codd Co., Baltimore, Md.: "We have a great many orders for tanks, marine boilers and considerable other work; working day and night. Judging from amount of inquiries for new work, etc., there will no doubt be a long continuance of good times. We have just installed in our works the Williams incandescent lights, which we find give perfect satisfaction. It is an improvement over all other kinds of light. It is a wonder in the brilliancy. It lights our works at night nearly as bright as day, and very much facilitates our present night work."

Great Deal Depending on Industrial Peace.

J. F. Winchell, vice-president and general manager the American Engineering Co., Springfield, Ohio: "The great activity in all industries during the past is destined to be continued certainly another year, at least. Of course, a great deal will depend on the satisfactory settlement of the labor problem generally, and long-continued strike in the belting trades, etc., would, of course, disturb any present satisfactory conditions. We are optimistic in our views, and certainly see nothing, outside of the one possible disturbing element, which is at all to be feared."

How a Reaction Might Occur.

W. J. Muncaster, vice-president and general manager Cumberland Steel Co., Cumberland, Md.: "Business has been very good with us, and orders do not show any falling off in business. This condition, we think, will continue unless the cost of manufacturing is increased and manufacturers are compelled to advance their prices; this would check buying and bring about a reaction."

Business Growing Steadily.

A. W. Ransome, secretary the Ransome Companies, New York: "If volume of business is an indication of a continuation of the great activity which is enjoyed at the present time, we would certainly say that there is every promise of a prolonged period of industrial activity. Our business is growing steadily. We have taken so far this month orders for more machines than we have sold in any one month. Rather than a tendency toward less activity, it seems to us that indications point to an increase."

Suggestions from History.

Myron H. Tarbox, secretary and treasurer Boston & Lockport Block Co., Boston, Mass.: "Our own particular business for the current year seems to be already anticipated, but there are certain indications that we cannot fail to note that would indicate that a change may be expected, perhaps early in 1904, which will more clearly define in regard to the future. The writer's personal opinion is that we have already reached the zenith in our prosperous times, and that it is only a matter of months before it will be clearly discernible that a change has set in and is working. We are not looking for any such panicky conditions as we had in 1893, but we think the signs of the times are such that the influencing concerns should begin pretty soon to hedge. The writer recollects very well that almost up to the eve of 1893 our business outlook was bright; also that while our business held up even after there had been a serious depression in general business, it did not rally as promptly as many other kinds of business. We think it is hardly safe to take any one or two distinct lines of business and make them stand for the average."

Faith in General Prosperity.

H. Huennekes & Co., sand and lime building bricks, New York: "Our business brings us constantly in contact with every kind of manufacturer, contractors, builders, architects, etc., and we have every reason to believe that the activity in industrial directions and the prosperity of the country has as yet not reached its climax. Concerning our own business, we have every reason to believe that the same is as yet only in its infancy, and we are aware of a great many other branches of industry in this country which are in the same condition. We have no particular political faith, and are not dependent in our business upon any other thing than the general prosperity of the country, which will permit people to invest money in the erection of our factories. The very

fact that we have now not less than fifteen factories in the course of erection, representing investments from \$25,000 to \$50,000 and more, and that this has been accomplished within such a short time, might be also considered a proof of the faith of other parties than ourselves in the general prosperity of the country, which would call for increased amount of building material, and causing the erection of a great number of factories in our branch of business."

Not Expecting Less Activity.

H. M. Brewster, treasurer Millett Core Oven Co., Brightwood, Mass.: "We have never seen business in our line as good as at present, and as the iron industry seems to be the thermometer of the business of the country, we are not looking for any less activity in the near future. Our sales are larger, and inquiries more frequent than ever before."

As Good as Last Year.

Walker & Elliott, machinists, Wilmington, Del.: "So far as our business is concerned, we think the outlook is as good as it was this time last year, and we can see no reason why it should not be about as good throughout the year. But should it prove not to be quite so good as last year we should not consider it a bad sign, as last year was the best we ever had in our nearly twenty-five years' business experience."

Trouble About Getting Material Promptly.

W. D. Dunning, Alexander Iron Works, Syracuse, N. Y.: "Judging from our own standpoint, for we are very busy, and have been for some time, we are forced to conclude that it will continue. There is nothing to indicate a letting up on orders, and the main point seems to be how quick we can furnish more than a dickering on prices. The greatest trouble we have found is in getting material promptly, as well as the holding up of prices generally on the raw material. It is our opinion that prices on pig-iron, for instance, will recede a little during the summer months in order to meet the great influx of foreign iron. When that is accomplished we imagine that the prices will maintain steadily throughout the year at very nearly the present figure."

Unjust Demands of Labor.

W. P. Davis, president the W. P. Davis Machine Co., machine tools, etc., Rochester, N. Y.: "We are well in touch with the machine-tool business all over the United States, and we find all manufacturers in this line that are building high-grade machinery have all they can do, and there is every prospect that it will continue for at least another year. The only thing that we can see that may bring trouble is the labor situation, and, so far as we know, it is not so much that the men are dissatisfied in the various factories as it is that the business agents and representatives are making trouble for them. At the present time we are having a strike in our own factory, notwithstanding the fact that our own men fought hard to avoid the strike. The union made several what we consider unjust demands, and demands that we could not meet. We refused to concede the same, and they ordered a strike immediately. We have many men that worked for us from ten to twenty years, and we never had any trouble with our help until they were organized. Since that time there has been constant trouble and annoyances not only to the firm, but to our employees. We know that nearly all of the manufacturers in our line hesitate when they think of increasing the size of their factories or contemplate putting in new tools. We believe if the trouble can be averted along these lines that we have no reason to expect a change in the situa-

tion for at last a year to come, as above stated. We feel that the conditions are such in the country at the present time that we should have a number of years of fairly good times, unless some unlooked-for condition should arise or the labor unions take such an aggressive position that it will bring on a crisis of this kind."

Readjustment May Come.

Charles F. Stodder, general manager India Alkali Works, Boston, Mass.: "It would be optimistic, but hardly fair, to assume that the next five years will be as active and prosperous as the five years already passed. Setbacks in the years of depression that have come almost periodically, and well known to everybody, have been caused by our readjustment of over-doing things, the railroads at one time and the Western farm lands at another, and to these will be added in some near future the changing and dissolution of many corporations that did not have an original right to exist permanently, being based upon the immense amount of idle money seeking investment in the years of 1900 and 1901."

The Abuse of Labor Unionism.

H. Collier Smith, president Smith-Warren Company, New York: "There is not a cloud on the horizon, with the exception of the abuse of labor unionism. I have found that there is an inclination on the part of capital in New York city to pursue a very conservative policy in regard to investments in which labor is an important factor. Further than this, I see no cause for apprehension. While the present situation as regards labor and capital is somewhat threatening, I have confidence that the good judgment and common sense of both sides will ultimately solve the problem. You will see from our letter-head that our goods are manufactured in a number of cities. We have had no complaints from any of our manufacturers in regard to lack of business, but, on the contrary, all of them are well supplied with orders, and several are far behind with their orders. Taken as a whole, I take an optimistic view of the business outlook."

Movements May Be More Conservative.

The Wagner-Palmros Manufacturing Co., coal-mining machinery, Fairmont, W. Va.: "We believe the conditions are very favorable for a continuance of the activity which has existed during the past two or three years. While there is not as great a tendency toward speculation as there was a year ago, there is every indication that development will not cease, and that the time of decrease in improvements is not close. Our business is very closely associated with the coal-mining business, and our observation is likewise confined to a very great extent to this. We, of course, buy a great deal from the iron and steel manufacturers, and from what we can see in this direction at the present time, there seems to be a tendency toward loosening up in prices, although deliveries have not materially improved. We attribute the change in prices more to a desire to stimulate trade than an uneasiness on the part of the manufacturers with respect to the future. The particular part of the country in which we are located is to a more or less degree new, and development has been very rapid during the past five years. There is not at this time as much development throughout this part of the country as there was a year ago. We attribute this more to the fact that most of the coal-mining interests have combined under one head than to a loss of interest in the territory itself. We do not anticipate a disastrous decrease in business, but the indications are that future transactions will be carried on in a more conservative manner than hereto-

fore, as you are no doubt aware there has been a great deal of speculating in almost every direction during the preceding two years."

A Little Caution Not Out of Place.

Builders' Iron Foundry, Providence, R. I.: "If the estimates in regard to the crops prove to be correct, we believe the present business activity will continue. We may be more pessimistic than is warranted, but we believe a little caution at the present time is not out of place, for to a certain extent there would seem to be truth in the paradoxical statement that 'when everyone is prosperous, no one is prosperous.' At the present high prices for material and labor, even the present prices for manufactured articles and the steady business we think will be found not to yield extreme profits in many lines."

More Business Next Year.

Tate, Jones & Co., Incorporated, engineers and machinists, Pittsburg, Pa.: "As far as our business is concerned, there is not only indications of continued activity, but we believe there will be more business during the next year, at least, than there was last year. As far as I am personally able to judge of conditions as I see them in other business, there seems to be some tendency toward a less activity. At present this tendency seems but very slight, and may not indicate any permanent condition."

Entirely Satisfied with Conditions.

McClave, Hamilton & Co., New York: "We are entirely satisfied with the present condition of business, and also the outlook for the future. We cannot say that there is any falling off in the volume of inquiries or orders, or any indication of so doing. About the only cloud in the sky seems to be the labor trouble."

Months of Phenomenal Business.

Brown & Zortman Machinery Co., machinery and supplies, Pittsburg, Pa.: "We cannot see any let-up in the conditions as they stand in the Pittsburg district. We have enjoyed three months of phenomenally large business, and as our line only goes to customers that are improving, enlarging or starting new plants, it certainly is an evidence that there is plenty of business moving. We have a large number of inquiries on our books, and a great deal of work is planned for the near future. We see no reason why the general run of business cannot continue for some time to come, especially in view of the immense sums being expended by railroad companies for improvements and enlargements all over the country."

Unusual Activity in Machinery.

W. R. Fleming, president and general manager Harrisburg Foundry and Machine Works, Harrisburg, Pa.: "This company has upon its books the largest volume of business since its organization, and the activity in placing contracts for machinery has been since January 1 unabated to the present time. While this condition may be partly attributed, no doubt, to the fact of having designed and produced new models in Harrisburg high-class automatic engines, which have been very popular and highly approved by the best buyers, yet there seems to be in almost every direction, with perhaps the exception of New York city and vicinity, an unusual activity in both inquiries and contracts for machinery of our kind. In New York city there is some considerable disturbance to business which would otherwise be projected, owing to the unreasonable demands of labor, which has checked the disposition of men of large affairs to press forward new undertakings. Inquiries and reports made by the managers of branch offices located at New Orleans, Atlanta, Baltimore, Philadelphia,

Pittsburg, New York and Boston produces the information that there seems to be no diminution in the volume of business generally, nor in prospective plans, so far as can now be determined. We are not able to express any opinion other than that so far as the present year of 1903 is concerned, barring labor disturbances, should be fully up to, if not a trifle greater in our line of business than 1902."

Steel Steadily Advancing.

Charles L. Allen, general manager Norton Emery Wheel Co., Worcester, Mass.: "Our business last year was very satisfactory indeed, it being the largest year which we have ever had. Up to the present time this year there is quite a large percentage of increase over last year. We see no indications of less activity, and see no reason why we should not have a continuance of the present prosperity."

Matters Moving More Slowly.

Whitehead Machinery Co., Davenport, Iowa: "In our judgment, the volume of inquiries at the present time is as great, if not greater than anything we have experienced in the last few years, but we are inclined to the opinion that matters come to a head more slowly and that there is more caution used at the present time, with the result that actual orders are not so readily forthcoming."

Considerable Business Before Them.

Chesapeake Iron Works, Baltimore, Md.: "We have only been in business about five months. Our experience during that time, however, justifies us in believing there is a considerable amount of business in the market, as evidenced by the number of inquiries we have received, and to all appearances the outlook is excellent for a very prosperous year, provided the present state of unrest among the laboring element can be eliminated."

If Labor Troubles Are Adjusted.

Albany Lubricating Compound & Cup Co., Adam Cook's Sons, New York: "The present condition of business in our special line is very satisfactory, and the outlook for Albany grease is more promising than ever for the future. The general condition of business and connections for the future depend very largely as to how the labor difficulties throughout the United States are adjusted. If the labor difficulties can be satisfactorily adjusted, we see no reason why the prosperity that we have been enjoying for the past three years should not continue for several years to come. We trust this will be the fact."

What Organized Labor May Prevent.

E. T. Shepard, secretary and manager Oneida Steel Pulley Co., Oneida, N. Y.: "So far as I am familiar with the conditions of the trade throughout the country, it has never been better than at the present time, and, with one exception, I do not know of any reason why business should not continue to be as good as it has been, and keep on improving for some time to come. It seems to me that, taking into consideration the fact that this country has recently acquired new territory, we may expect that in the near future it will rapidly develop and will require an enormous amount of the manufactured products. It also seems to me that this country at the present time is in better condition to supply the wants of the new territories that we have taken on than they can be supplied from any other source. Our facilities for manufacturing are constantly on the increase. We are also improving the process of manufacturing, so that we can manufacture for less money. In our particular business our export trade is constantly on the increase, so that now we are shipping into nearly every foreign country. Our business is

perhaps a better thermometer for indicating the growth or condition of the business in this country than that of any other business, and is perhaps affected sooner than any other business by the general conditions throughout this country, as well as foreign countries. The one exception referred to above is the labor difficulty. Notwithstanding the fact that mechanical labor in this country is receiving much larger pay than in foreign countries, we have been able to produce goods here by our improved methods (and the amount of labor that has in the past been performed by the laborer) at a cost that has enabled us to export goods to foreign countries at a profit—not a large profit, but yet at a profit that has paid us to keep our factories going; but as our labor difficulties increase we find it harder to compete with foreign manufacturers, and what we fear is that the time will soon come (if the rules and regulations adopted by the different labor organizations continue to prevail) when labor will be of no more value here than it is in some foreign countries. The tendency of the different labor organizations at the present time is to do as little for the money they get as is possible. In other words, the idea seems to prevail with the labor element that the less work they do the more work there will be left for the other fellow to do. Another of their rules that is bad is putting all mechanical labor on a level basis, so that one man is of no more value than another. It is so in manufacturing and so in the building trade; in fact, all of the trades. The plan is that the best man shall not be allowed to turn out any more work in a day than the poorest man can easily turn out. The result is that they are all poor men, and that labor today is costing us from 20 to 30 per cent. more than it was two years ago. How long we can stand this before our export trade will be cut off is a question. That, together with the fact that we are in a condition now where (if we are running at our full capacity) we can manufacture a much larger amount of goods than would be consumed in this country, and that we necessarily have to depend upon our exports to keep our factories going, will make it very bad for us. When it gets into a condition where labor is costing us in this country as much as it is in foreign countries, our exports for manufactured products will cease, and it is our opinion that if the above rules are adhered to by the different labor organizations the time will soon come when they will discover that they have 'killed the goose that laid the golden egg.'"

Building for Enlarging Business.

Wilson Laundry Machinery Co., Columbia, Pa.: "We have all the business we can handle at present, and future prospects are very encouraging to us, so much so that we are now putting up an addition to our plant, a new building 50x200 feet, in which we will install almost a whole new machine-shop equipment of tools. We will devote our present plant when the new one is ready to woodworking and paint shops alone. This increase is a necessity with us for present and future facilities."

No End to Labor's Demands.

Chas. L. Dean, vice-president the Ludlow-Saylor Wire Co., St. Louis, Mo.: "The present condition of business is good, and the outlook for the balance of the year would be first rate were it not for the continued demands of labor through the 'walking delegate' and the 'business agent.' Manufacturers have recognized the fact for some time past that in many respects labor was entitled to better wages, and have granted it. The demand is no sooner granted than another is presented, and it has resulted in the checking

of building operations to such an extent that it looks as though the end had come unless labor is more reasonable; if it insists, the tendency must be towards less activity, at least in building."

No Slowing Down of Consumption.

James McBrier, president the Ball Engine Co., Erie, Pa.: "My observation is that the existing conditions are favorable for a continuance of the present activity in business. The only cloud apparent is the demand of labor (in many cases unreasonable), making the cost of production so high that it may hinder consumption. As yet we see no evidences of slowing down in consumption. All indications are for a good year for 1903. Further than that we do not care to predict."

Agriculture and National Prosperity.

Joseph D. Bascom, secretary and treasurer Broderick & Bascom Rope Co., St. Louis, Mo.: "We can see no reason why we should not have continued prosperity for at least a year, if not for two years. The future looks very bright, and nothing, in our judgment, will prevent us having good times, unless it be labor troubles. There is certainly a big demand in all lines for manufactured articles, and we believe that the demand is greater than the supply. We look for higher prices. Besides, the crops in the West, which cut an important figure in the welfare of this nation, as all of your readers well know, show every indication of being the best and largest we have ever had. We have had an unusually good spring, plenty of rain and sunshine, with enough cold weather to hold back the crops, so that they would not grow too fast above ground, which, of course, strengthens the roots. This cold weather also has a tendency to destroy the insects, which are so injurious to the crops. For these reasons we think you can look for one of the best and largest crops we have ever had, and that means prosperity."

Adding to Productive Facilities.

G. W. Soule, president Soule Steam Feed Works, Meridian, Miss.: "Judging from the condition of our own business, there is nothing that involves any doubt about the continuance of prosperous business conditions. Our business is increasing. We are constantly having to add to our facilities of production. Are more behind orders just at present than we have ever been. During the portion of the year already elapsed our business has increased about 35 per cent. over the same time for last year. We are finding it a little easier to get prompt shipment of pig-iron, bars, etc., than it was some time during last year, still it appears that the country is absorbing the entire production of these articles. Our own business is largely with lumber manufacturers, and the fact that they are buying more and more would indicate that their business is in good condition. Taking altogether, we can see nothing that appears to indicate any tendency for less activity in industrial interests."

Digging in Development.

Julius C. Birge, manager St. Louis Shovel Co., St. Louis, Mo.: "We have never seen such a demand for shovels and spades as has existed for the past four months, and, although it is difficult to foretell what will happen in the future, we are looking for a good trade for several months to come. The fall trade will, of course, depend considerably on the outcome of this year's crops and other local conditions in different sections of the country. There is a very naturally healthy condition of affairs existing throughout this section of the country, and unless some radical change should come up, we see no reason why the present good times should not continue throughout the balance of this year."

Running the Factory Overtime.

A. J. Beckley Company, perforators of all metals, Garwood, N. J.: "The present business conditions and the outlook for the future appear favorable, and there is no reason to anticipate any reaction for the present. The manufacturing operations of this company during the past year have been marked by a demand for perforated metal that has been greatly in excess of the capacity of the works. This has necessitated the running of our factory overtime in order to make reasonably prompt shipments. All indications of the activity and prosperity which the country has enjoyed indicate a continuance of trade conditions."

Mills Are Fully Occupied.

The Enterprise Boiler Co., Youngstown, Ohio: "Judging by the inquiries we are having, there does not seem to be any diminution for material in our line. We note the mills are all fully occupied, so that it is difficult to get material for quick shipment, and we have no reason to think that there is any indication of a change from present conditions."

Receiving Many Trade Inquiries.

The Fred W. Wolf Co., engineers and machinists, Chicago, Ill.: "So far as our business enables us to judge, the prospect of continuance of present business activity is very bright indeed. We are receiving many inquiries from all over the country, and have enjoyed a most successful season; this in spite of the fact that last summer was a disastrous ice-making season in a great many parts of the country, and it might have been reasonably expected that this would have had a very marked tendency to curtail inquiries and to limit new installations. It has not, however, had that effect, and from all indications we believe that the next few years in the ice-making and refrigerating business will be prosperous ones indeed."

Record of Clear-Visioned Judgment.

R. E. Miller, secretary W. E. Caldwell Co., Inc., towers, tubs and tanks, Louisville, Ky.: "From our observation it would appear that we are assured of an almost certain continuation for another year, at least, of the industrial activity and business prosperity that is now with us. Some few of the many facts that impress us as being most significant in this respect are that the railroads, which represent such a large proportion of the purchasing power of the country, have orders placed for rolling stock and other equipment that cannot be filled within the present year; that the steel and iron industries are still sold ahead for months, and that the general average of crop conditions at the present time promises another increase to the actual wealth of the country even greater than that produced by the bountiful harvests of 1902. and, in addition, Mr. Morgan (whose vision in such matters is of proven clearness) has seen fit to go on record in publicly predicting the maintenance for several years of the present high level of industrial enterprise and activity. So far as our own business is concerned, the conditions were never more satisfactory, and the future never looked brighter."

Cost of Material Advancing.

Samuel M. Nicholson, president Nicholson File Co., Providence, R. I.: "The business situation from our standpoint looks very favorable for the balance of the year 1903, at least. The demand is excellent, and appears to come from all quarters. It is true that we have been somewhat tardy in making shipments, but our recent added facilities will, we trust, assist us in being more prompt in all this in the future. As regards prices, we have very little to say at this time, but in view of the fact that every important supply

that enters into the cost of our finished products has been advanced within the past six months, and this, together with the higher prices paid for labor, may make it necessary in the near future to demand more for our output. Orders are placed freely, and appear to be for immediate requirements."

No Decline in Building Interests.

Eureka Supply Co., Chattanooga, Tenn.: "The present business conditions and the outlook for the future very flattering if the inquiries for prices on various material from all parts of the country mean anything. At any rate, the prospects are brighter for a good successful year than they were twelve months ago. We have noticed no decline in building interests, and feel very much encouraged in the present aspect of things."

Raw Material Easier to Obtain.

Charles H. Besly & Co., fine tools, Chicago, Ill.: "Our business is very good. The outlook for future business is very encouraging. We have booked many orders for future delivery, and there seems to be no end of prosperity. We are now in our new quarters. Our Gardner grinders are being shipped to New York, Pennsylvania, Ohio, Michigan, Iowa, Pacific coast and Austria. We are selling a large quantity of our Helmet oil. We are also having a large demand for our Bonanza and Badger oil cups. These demands are mostly from makers of agricultural implements and iron-working machinery, who are adopting these cups. Our Helmet temper taps are now being called for and used largely by bolt works, where very hard usage is required of taps. Raw material we find at present much easier to obtain than in the past. We are having many inquiries from South America and Europe. Orders from these countries are increasing greatly."

Tendency Toward Less Activity.

Nordyke & Marmon Co., (Incorporated), flouring-mill engineers, Indianapolis, Ind.: "As far as we are able to ascertain, existing conditions in most lines of business are fairly satisfactory, and we anticipate a continuation of a reasonable degree of prosperity for some time to come. However, there seems to be a tendency towards less activity in industrial interests. We do not view this as alarming, but consider it rather as a tendency towards normal conditions. The intense activity of the recent past has undoubtedly been abnormal in most lines of business, and a certain degree of reaction is inevitable."

Capacity of Works Is Taxed.

Atlas Engine Works, Indianapolis, Ind.: "Our present trade is exceedingly large, and taxes the capacity of the works. The demand for our goods is constantly increasing, and the volume of inquiries is larger than ever before, and is representative of all industries. Our collections are gratifyingly prompt, and purchasers are meeting their obligations fully without requests for extensions."

Orders Are Plentiful.

J. A. Jeffrey, president the Jeffrey Manufacturing Co., Columbus, Ohio: "The conditions at the present time are very favorable, in that orders are plentiful, and the prospect that they will continue so for some time to come seems almost certain; provided, of course, that no sudden or great change in the governmental policy occurs, or that the seeming unrest in certain labor circles does not develop into a misguided policy and seek to unduly increase wages or curtail the output, thus necessarily raising prices to such an extent that certain internal and most all foreign markets will be cut off, resulting in general depression and stagnation of business. However, I believe that labor lead-

ers already foresee this danger, and will counsel against this tendency and practice. With a continuance of the present governmental protective and reciprocal policies and this other danger virtually out of the way, I most confidently look for a continuance of the present great activity and prosperity for several years to come."

Their Views Generally Optimistic.

The Williams Patent Crusher & Pulverizer Co., St. Louis, Mo.: "Business conditions and outlook never were better with us, if as good."

Western Electrical Supply Co., St. Louis, Mo.: "Business conditions are very satisfactory, and the outlook promising, both locally and in the territory tributary to us. We look for an extremely prosperous season."

The Girard Boiler & Manufacturing Co., Girard, Ohio: "We look for at least another year of good business such as we have had during the past few years."

W. H. Gibbs & Co., machinery, Columbia, S. C.: "We are finding business very good, and consider the prospects for the future very favorable."

The Eastern Granite Roofing Co., New York: "Business prospects are unusually bright, and we have all we can do to fill our orders, and have many orders on our books for future delivery."

Norristown Covering Co., Norristown, Pa.: "I have just made a visit to our Baltimore, New York and New England offices, and find there is plenty of work, and the outlook is very good for the future."

Charles A. Brinley, managing director the American Pulley Co., Philadelphia, Pa.: "As far as our own business furnishes indications about the immediate future, we have every reason to anticipate continued activity. The volume of our business for the first three months of 1903 has been considerably greater than in any three months of 1902."

McKiernan Drill Co., New York: "As far as we can see, the present good business that the country is enjoying will continue for at least the coming year, and we, of course, hope that it will continue longer."

H. B. Stauffer, secretary and treasurer Monitor Steam Generator Manufacturing Co., Landisville, Pa.: "While business this spring in our territory, which includes mainly States of Pennsylvania, New Jersey, Maryland, Virginia and West Virginia, has been better than at any time we can remember of, the present unsettled condition in the coal regions makes the future somewhat uncertain. We anticipate a business equal to if not better than the past two years, which have been the best in our history."

Wm. Jennings, treasurer Jackson Manufacturing Co., Harrisburg, Pa.: "We have plenty of orders on our books, and from present indications do not see why we should not be very busy for some time to come."

The Green Fuel Economizer Co., Mattawan, N. Y.: "Present conditions of business will continue, and the outlook for the future is very bright. We see no tendency towards less activity in industrial interests."

France Packing Co., Inc., Tacony, Philadelphia: "Judging from the volume of orders received, our business is still on the rising tide, and we have no indications of its diminishing."

Wm. F. Kirk, manager McLanahan-Stone Machine Co., Hollidaysburg, Pa.: "The outlook at the present time looks promising to us, as we are extremely busy, and expect to be so for the balance of the year."

Baldwin Locomotive Works, Burnham, Williams & Co., Philadelphia, Pa.: "So far as our business is concerned, we do

not see any indications of a decreased activity in industrial affairs."

Bacon Air Lift Co., New York: "We consider the present outlook very favorable, and there is every indication in our particular line of work of the continuance of the present prosperity for some time to come."

Keasbey & Mattison Company, Ambler, Pa.: "We do not see any tendency towards less activity in industrial interests; in fact, we look for rather more activity than heretofore this year. From our point of view, the unsettled condition of labor is the only industrial menace at present."

The Murray Iron Works Co., Burlington, Iowa: "Never before was there so much business in sight as at present."

S. Olin Johnson, president Penberthy Injector Co., Detroit, Mich.: "We find business in general in our line in excellent condition. One of our salesmen has just returned from a trip through the South, and reports almost without exception a good outlook for the future. The demand for such goods as we manufacture is greater at this time than ever before at this season of the year, and we can see no immediate prospect for any change in this situation."

James Kilbourne, president and general manager the Kilbourne & Jacobs Manufacturing Co., Columbus, Ohio: "We see nothing that tends towards less activity in industrial interests; on the contrary, so far as our business is concerned, our trade has never been as large, nor the outlook for future business as good."

H. Ellis, Jr., vice-president Smith-Courtney Co., supplies and machinery, Richmond, Va.: "We believe the outlook for future business in our line is exceedingly good. The demand still holds up, the factories are all extremely busy, and so far as we can see, there is nothing to mitigate against the activity and prosperity which we are at present enjoying. Our business has been very good recently, and we are looking forward with much encouragement for continuation of the same."

Geo. V. Cresson Co., Philadelphia, Pa.: "We see no decrease in the volume of the business now offered."

H. H. King, secretary the E. T. Burrows Co., Portland, Me.: "Many of our salesmen, and we have them in all sections of this country, have reported that they foresee a large business for next year, an unusual amount of building being projected. Their increase of sales this year is proof positive of present prosperity, and it is quite general throughout the United States."

Hill Tool Co., Anderson, Ind.: "Our present business is the largest we have ever done, and our new factory is running night and day. We have received several exceedingly large orders from the Pacific coast and Canada, and our foreign business is keeping up to the standard. Our orders, coming from all over the country, give us the idea that the general condition of business is very gratifying."

The Acme Machinery Co., Cleveland, Ohio: "We find that the usual supply of orders is coming in right along, and the outlook for the future seems very encouraging. We do not notice any particular occasion for any tendency toward less activity in industrial interests, as we are receiving daily inquiries for our machines. We do not know of anything special that we would care to have published at this writing, and we trust the information given will be of service."

W. C. Arthurs, vice-president and treasurer Mt. Vernon Car Manufacturing Co., Mt. Vernon, Ill.: "There is nothing so far in sight in our business to indicate any tendency towards less activity."

Prices, however, seem to be at about the highest point. The pig-iron market seems to be a little weak. Everything in this section of the country points to good crops, and we are old-fashioned enough to think that has a good deal to do with the prospects for the future."

Charles Morgan, oil, gas and water well contractor, Birmingham, Ala.: "As we in Alabama live off of coal and iron, I think we are at the top at present."

H. P. Stratton, president Stratton & Bragg Company, hardware, Petersburg, Va.: "The prospects for business in our section are brighter than at any time in our recollection. Up to a few years ago everyone was crying hard times; now conditions have changed. The farmers, as well as the people in the city, all seem to be in good financial condition, and everyone seems to wear an air of prosperity. We think the present conditions indicate that the prosperity and business activity will continue for some time to come."

INDICATIONS OF INCREASE.

Activity in Furnace Work and Furnace Building in Alabama.

[Special Cor. Manufacturers' Record.]
Birmingham, Ala., April 27.

There is no new feature in the pig-iron market this week as far as the actual conditions are concerned. Sales are few, and in small lots; both maker and consumer continue to "stand pat," one contending that there will be no reduction from the present range of prices, and the other, in the light of the recent cut, expecting and waiting for additional reductions. But there is a very interesting thing in the apparent fact that the makers are more closely in sympathy than for some time, and there is an expressed determination to have no more reductions. A well-known broker said Saturday: "I do not expect another reduction—not, at least, one to be heralded to the world. I should not be surprised if sellers make in a quiet way some concessions from time to time, but to my mind there is no sign of another announced reduction. I believe the furnacemen see the last one to be a mistake." This, coming from a broker who has been for some weeks inclined to talk farther falling off, is regarded as more than ordinarily significant.

Then there is this feature more than at any other time recently noticeable: Every furnace now running is being worked to its fullest capacity; every furnace out for repairs is being rushed to iron-producing conditions, and every furnace building is being crowded ahead as fast as possible. All this indicates that there is to be a considerable increase in production as compared to last year. The railroads are furnishing all the cars needed, and the iron is going out hardly cold. There is now no such thing as storage and warrant yards, and if there was, the orders already booked would allow no iron to go to them for several months. Plainly to every man who thinks this shows that the maker is busy getting the "decks clear" for the demand he feels sure will be his after the first half of the year is a little nearer gone.

The charcoal furnace of the Shelby Iron Works at Shelby, which has been out for repairs, went into blast Saturday, and is expected to make its first cast today.

The Sloss-Sheffield Company is greatly pleased with the way the newly-repaired Philadelphia furnace at Florence is behaving.

General Manager Charles McCrery of the Tennessee Coal, Iron & Railroad Co., relates that experts have pronounced the steel rails made at Ensley as more durable and serviceable than Bessemer rails. So far the mill has made only about 10,000

tons of rails, but as soon as the plant is fully equipped Mr. McCrery says the output will be 1000 tons a day. Going further, Mr. McCrery says the work of overhauling the five old furnaces at Ensley is being pushed, and preparation is being made to build the sixth. When finished the plant will be composed of practically five new furnaces.

The Republic Company is making sixty tons of steel a day at its rolling-mill plant, which is consumed right in the rolling mill.

The effort of the independent coal operators to get together seems to promise success. It has often been a source of loss when those mines not connected with furnaces were unable to agree on plans to protect themselves in labor and markets.

The Louisville & Nashville will build shops and yards at Boyles, just outside the city, expending thereon \$300,000. The building now used for these purposes in the city will be abandoned.

The Du Pont Powder Co. will build a plant in the district to cost \$250,000. The land people will also come along to manufacture shells.

J. C. Boling of Hawsville, Ky., is in the district looking for a location for a plow factory.

The Alabama Steel & Wire Co. is building a water-works plant at Gadsden to supply its furnaces and steel mill. An immense standpipe will be constructed, and modern high-pressure water-works pumps will be installed. Three of the four stoves for the new furnace are being lined up, and the other will reach that stage pretty quick. Structural beams for the big buildings at the steel mill are being assembled, gas-producing furnaces and conduits are making progress, and much headway has been made on the eight batteries of boilers for the bloomery. Much of the heavy machinery is being received.

It seems that the building of the big plant which the Mohawk Valley Steel & Wire Co. will construct at Brunswick guarantees the finishing of the Brunswick & Birmingham road to Birmingham. It is announced that this district will be drawn upon for both ore and coal.

It is learned here that West Virginia capitalists have secured an option on the Gurley & Paint Rock Valley Railroad, along with several thousand acres of mineral lands. The road will open the richest section in Jackson county. It will run from Gurley, Ala., on the Memphis & Charleston, to Winchester, Tenn., on the Nashville, Chattanooga & St. Louis. The road was surveyed and partly graded some years ago.

H. W. L.

BRUNSWICK STEEL PLANT.

Preliminary Work for the Industry Now Under Way.

[Special Cor. Manufacturers' Record.]
Brunswick, Ga., April 27.

In the presence of a large crowd last Wednesday the first work on the plant of the Mohawk Valley Wire & Steel Co. was begun. This preliminary work consisted in clearing the grounds of trees, so that the foundation work could begin. The resident engineer arrived next day, and the work of clearing up the 1000 acres is progressing in a satisfactory manner.

Owing to the unusual interest aroused through the South on account of the building of this plant here, the company decided to lay a cornerstone to the plant. This will be done next Thursday, when ex-Senator John L. McLaurin of South Carolina, who is now president of the Brunswick & Birmingham Railroad Construction Co., will be the orator. President Umpstead of the Mohawk Valley Steel & Wire Co. and other gentlemen will be present.

An official statement issued by the Mohawk Valley Steel & Wire Co. shows it controls four wire plants at Cuyahoga Falls, Ohio, and Newcastle, Pa.; 42,000 acres of coal, ore and mineral lands in Cullom and Fayette counties, Alabama; 50,000 acres of coal and ore lands in the Warren area of the Birmingham district, in Fayette and Tuscaloosa counties, Alabama, and 50,000 acres of brown-ore land in Alabama, and at Brunswick 1000 acres of land bordering on deep-water frontage. At Brunswick it states that the mill to be erected will consist of five 500-ton blast furnaces, sixteen open-hearth furnaces, blooming, billet, bar, rod, cotton-tie, sheet, rail and structural mills, and a complete shipbuilding plant.

Gold Dredging, The New Industrial Publishers, Bunting & Van Asmus, Chicago. Price twenty-five cents.

This is a handsomely-printed booklet of seventy-five pages, with several illustrations, dealing with the evolution and the present status of gold-dredging. It is a compilation of articles from reputable authorities, and will interest the investing public, mining men and engineers.

Dispatches from Nashville report that Col. Jere Baxter has resigned as president of the Tennessee Central Railroad, and has been succeeded by J. C. Van Blarcom, vice-president of the National Bank of Commerce of St. Louis, and who is reported to be also interested in the St. Louis & San Francisco Railroad and in the Mexican Central Railway. He has been a director in the Tennessee Central for some time.

An effort is being made to organize a company for the purpose of constructing an electric railway from Winston-Salem, N. C., to Yadkinville, a distance of about twenty-five miles. Among those reported interested are J. Q. Holton, J. M. Phillips, M. W. Mackie, W. A. Hall, H. H. Mackie, T. R. Harding, H. B. James and M. A. Royall of Yadkin county. F. A. Yates of Panther Creek, N. C. may be addressed.

It is reported from Cincinnati that W. J. Murphy, general manager of the Cincinnati, New Orleans & Texas Pacific Railway and of the Alabama Great Southern Railroad, has been elected vice-president of those companies, and will be succeeded as general manager by W. A. Garrett, recently general superintendent of the Philadelphia & Reading Railway. These appointments will take effect May 15.

Hugh L. Bond, Jr., general attorney of the Baltimore & Ohio Railroad, has been made second vice-president of the company in charge of the legal department; George L. Potter, general manager, has been made third vice-president in charge of operating, and C. S. Sims, now general superintendent in New York, has been made general manager.

The first annual meeting of the recently-organized Virginia State Board of Trade will be held at Virginia Beach on June 23. The executive council of the board has elected unanimously as secretary and treasurer Mr. R. A. Dunlop, who has for several years been the efficient secretary of the Richmond Chamber of Commerce.

It is announced that the Anniston plant of the Southern Car & Foundry Co. will shortly begin work on an order for 1200 box cars for a Western railroad involving an expenditure of nearly \$1,000,000.

The sales in the Joplin, Mo., district during the week ended April 25 were 11,315,560 pounds of zinc ore and 1,371,190 pounds of lead ore, valued in the aggregate at \$230,297.

RAILROADS.

[A complete record of all new railroad building in the South will be found in the Construction Department.]

GOING INTO ALABAMA.

Illinois Central Announces Extension of a Detached Piece of Line.

Formal notice has been filed at Montgomery, Ala., that the Canton, Aberdeen & Nashville Railroad, which belongs to the Illinois Central system, but which is not now directly connected with it, will be extended. The line is a present only about eight miles long, from Winfield, Ala., on the Birmingham division of the St. Louis & San Francisco Railroad, northerly to Brilliant, in Marion county. The plan as announced is to extend northeast to Double Springs, in Winston county, and thence northwest through Winston, Lawrence and Colbert counties to Sheffield, Ala., thence along the south bank of the Tennessee river to the Mississippi line, a total distance of about ninety miles.

This extension, it is presumed, is intended to form a part of a line of the Illinois Central to enter the Birmingham district, inasmuch as this extension, as announced, is in the direction of Jackson, Tenn., near where work is reported to have begun by the Illinois Central for a line into the Alabama mineral region. The notice of extension of the Canton, Aberdeen & Nashville Railroad says that the decision of the company to continue the line was made at a meeting in Chicago on April 21, and a copy of the resolution is now filed with the secretary of State at Montgomery, Ala., the resolution being signed by Vice-President John C. Welling of the Illinois Central, in the absence of President Fish.

A line drawn southeast from Jackson, Tenn., and continued into Mississippi would strike the Alabama State line at the point where the proposed extension of the Canton, Aberdeen & Nashville would terminate. To continue along the line of the extension as far as Double Springs would still be in the general direction of Birmingham. Inasmuch as the Illinois Central has been reported as making surveys northwest from Birmingham, it is, presumably, the intention of the company to eventually build a direct line to that city from Double Springs. Meanwhile, if it be true, as reported, that the Illinois Central and the St. Louis & San Francisco have made arrangements for interchange of traffic, business could be carried on between them via Winfield, Brilliant and Double Springs.

INTO RICH COAL FIELDS.

Middlesboro and Harlan Extension of the Southern Railway in Kentucky.

Reports from Middlesboro, Ky., state that the Middlesboro Mineral Railway Co., which proposes to build a coal road from Middlesboro to Harlan, about thirty miles, has purchased forty acres of land for terminals at Middlesboro, and Mr. Henry Fonde, vice-president of the road, who is also general agent of the Southern Railway at Knoxville, Tenn., is quoted as saying that the line will unquestionably be built.

It is further reported from Middlesboro that rights of way through the Harlan coal fields have been purchased, and that the Southern Railway's purpose is to make a belt line through the Kentucky, Virginia and Tennessee coal region, and that later it will build from Harlan to Pikeville, Ky.

From Barbourville, Ky., it is reported, concerning this plan, that New York cap-

italists are looking over the coal region around the headwaters of the Kentucky river and its tributaries in Southeastern Kentucky, and that several syndicates have secured large tracts of land. The Southern Railway is reported to be anxious to build the Middlesboro and Harlan line as soon as possible, and to extend it into Leslie county, a total of about fifty miles. It will follow the course of the Cumberland river, thus avoiding tunnels.

It is further reported that recent tests have resulted in the discovery of veins of cannel coal four feet thick and bituminous coal in seams six feet thick. It is stated that in some places from the foot to the summit of the mountain there are five seams of coal.

IMBODEN & ODELL.

New Coal Road in West Virginia to Reach Three Rivers.

Messrs. Chilton, MacCorkle & Chilton, lawyers, of Charleston, W. Va., write the Manufacturers' Record as follows:

"The Imboden & Odell Railroad Co. has been organized to build forty-three miles of railroad, generally through the lands of the Blue Creek Coal & Land Co. This road will connect the Elk river and the Gauley, and it is also intended to connect the Elk river with the Kanawha river. This will make a deep-water connection.

"Those interested have subscribed and paid in \$2,000,000 to the enterprise and land company. They have 47,000 acres of land, and the intention is to develop it very largely. The territory to be developed is one of the richest mineral and timber territories in West Virginia. It has the No. 5 coal and the other Kanawha splint coals in their perfection. It will be a very important railroad, and will develop the upper Kanawha county, running through to Nicholas county, on the Gauley river. The railroad will be a common carrier, and will also serve the land company. It will be thoroughly completed and carefully constructed.

"The men who control the enterprise are E. S. Jones of Scranton, Pa., and ex-Governor W. A. MacCorkle of West Virginia. There are associated with these gentlemen a number of very rich capitalists in Scranton and Wilkesbarre, Pa.

"The road will be driven to an early completion, and the rights of way and surveys have been settled. Mr. C. P. Peyton is the engineer in charge."

NEW LINE IN TEXAS.

The 'Frisco System May Be Interested in Colonel Lott's Plan.

The San Antonio Express of San Antonio, Texas, says that J. F. Hinkley, chief engineer of construction of the St. Louis & San Francisco Railroad, and S. F. Read, representing Johnson & Johnson, railroad contractors, of St. Louis, who built the 'Frisco extension from Brownwood to Brady, Texas, have made an inspection of the line of railroad projected by Col. Uriah Lott from Sinton to Brownsville, Texas, and sixty miles up the Rio Grande valley.

Mr. Hinkley is reported as saying that he did not inspect the route for the 'Frisco system, but for St. Louis capitalists; also that the proposed road would not be expensive to build, as it presented no serious engineering features. Mr. Read is quoted as saying that if the reports prove satisfactory the road ought to be built within a year.

From Corpus Christi, Texas, comes the statement that it is expected that grading on the line will begin in June. The line would be about 260 miles long, and it is expected that the 'Frisco would eventually acquire it.

A Texas & Pacific Extension.

Construction on the Donaldsonville & Napoleonville Railway, which is to extend from Donaldsonville to Napoleonville, La., has begun. Official information received by the Manufacturers' Record is to the effect that the company has its terminus and connection with the Texas & Pacific at Donaldsonville, and double-tracks that line to Geary Station, thence taking a course almost due south along west bank of Bayou La Fourche to Napoleonville, a distance of about fifteen miles, the principal stations on the line being Palo Alto, Avon, Klotzville, Paincourtville and Brule St. Vincent, besides flag stations.

The railroad was promoted and engineered by Mather D. Bringer, its vice-president and general manager, through whose efforts the plan has been carried through and the road actually placed under construction by the Texas & Pacific Railway Co. as a Gould line. It is expected that the road will be completed as far as Napoleonville within five months, and with proper co-operation on the part of the people it is hoped to extend it into Texas, forming an important link for transcontinental service.

Extensions at Birmingham.

The Birmingham Railway, Light & Power Co. of Birmingham, Ala., through a circular-letter to its stockholders, announces that it will make further extensions and improvements to the extent of more than \$1,000,000. These improvements will consist of extensions to the railway property and the purchase of additional equipment for the same; also in increasing the capacity of the electric-light plant and in making extensions to the gas plant and mains. It is stated that the business of the company for the quarter ending April 1 showed in the railway department alone an increase of 22 per cent. over the same quarter of 1902, and that the increase in the lighting business, notwithstanding the reduction in the price of gas, was more than 28 per cent. for the month of March over the increase for March, 1902. These improvements are to be paid for by the recent increase of \$1,000,000 in the preferred stock of the company.

Apalachicola Northern.

Mr. H. O. Clement of the Minnesota Lumber Co. writes from Valdosta, Ga., to the Manufacturers' Record as follows:

"The name of the railroad we are to build from River Junction, Fla., to Apalachicola is the Apalachicola Northern Railroad Co. The incorporating officers are: President, C. B. Duffy, Worcester, Mass.; first vice-president, H. O. Clement, Valdosta, Ga.; second vice-president, B. H. Beverly, Apalachicola, Fla.; secretary, J. H. Trump, Valdosta, Ga.; treasurer, W. A. Griffith, Valdosta, Ga.

"The road will be about seventy miles long, and opens up nearly 1,000,000 acres of timbered lands, the greatest part of which will be good farming lands after the timber is removed. The engineer to be in charge of the work has not yet been appointed."

England & Clear Lake.

The England & Clear Lake Railroad is a standard-gauge line nine miles long which is to be built from England, Ark., via Clear Lake and the Keo Shingle Co.'s mill to Lasiter Landing on the Arkansas river. It is expected to get the line completed as far as the mill by September 1, after which it will be completed to the river as soon as possible. This information is sent to the Manufacturers' Record by J. E. Hicks, secretary of the Keo Shingle Co., who also states that the en-

gineer in charge of the work is J. D. Beakly.

All of Southern Materials.

A dispatch from Meridian, Miss., says: "The Northeastern shops of this city have just completed the construction of sixty freight cars for the Vicksburg, Shreveport & Pacific Railroad. The cars were built in eight days, all the woodwork being from Mississippi timber and all of the iron from Alabama. The cars are valued at \$860 each."

Railroad Notes.

The Baltimore & Ohio Railroad Co. will, it is reported, order from 100 to 150 locomotives for delivery in 1904.

The resignation of H. H. Pearson, Jr., as president of the New Orleans Railways Co. is reported from that city.

The Southern Car & Foundry Co. at Anniston, Ala., will, it is reported, soon begin work on 1200 cars for the Atchison, Topeka & Santa Fe Railroad.

The Chicago, Rock Island & Pacific Railway Co. has purchased ten blocks of land on the bay front at Galveston, Texas, adjoining the Southern Pacific docks.

The International & Great Northern Railroad has completed the Johnson tap to Anderson, Texas, and construction is now being pushed to reach Madisonville by July 1.

The Northern Central Railway (Pennsylvania system) is to build another large pier on its Canton property at Baltimore, Md. It will be about 935 feet long and 120 feet wide.

The Florida East Coast Railway is reported to be contemplating a scheme to drain part of the Everglades. J. S. Frederick of Miami and George Butler of West Palm Beach are the engineers reported to be making the plans.

R. S. Lovett, counsel for the Southern Pacific Railway in Texas, has been elected president of the Houston & Texas Central Railway, filling the vacancy caused by the retirement of C. H. Tweed of New York. The board of directors is headed by E. H. Harriman.

Mr. B. B. Gray, president of the Ocilla, Pinebloom & Valdosta Railway Co., writes the Manufacturers' Record from Pinebloom, Ga., stating that the company expects to extend its line to Nashville, Berrien county, Georgia, a distance of six miles, and to have trains running from Pinebloom to Nashville by the first of September.

The Mobile, Jackson & Kansas City Railroad, now building northward through Mississippi to connect at Pontotoc with its subordinate line, the Gulf & Chicago Railroad, is reported to have secured a charter for the latter to extend northward from its present terminus at Middleton, Tenn., to Jackson, Tenn., about forty miles.

The Seaboard Air Line Railway has sold \$6,000,000 of 4 per cent. bonds, the proceeds of which will cover the cost of construction of its extension from Atlanta to Birmingham. The bonds, which are a first lien upon the Birmingham division, were taken by a syndicate formed by Laidenburg, Thalman & Co. of New York, and which includes Baltimore as well as New York capitalists.

Concerning the report that the St. Louis Southwestern Railway will build an extension from Gatesville to Hamilton, Texas, Mr. M. L. Lynch, chief engineer, Tyler, Texas, informs the Manufacturers' Record that the company had a line surveyed between those points two years ago, the distance being thirty-two miles, but concerning the rumors of building the extension he has no definite information.

TEXTILES.

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the Manufacturers' Record. We shall be glad to have such matter at all times, and also to have any general discussion relating to cotton matters.

An Important Contract Awarded.

A contract which is of importance because of the developments its completion involves has been awarded to Geo. O. Tenney of Spartanburg, S. C. This contract is for the construction of a powerhouse and a dam 900 feet long and 25 feet high at Neals Shoals, near Union, S. C. The Union Manufacturing & Power Co. has awarded the contract. This company was announced in February as being organized to develop this power and erect an electric plant to transmit the power to Union for operating cotton mills. It was previously stated that the first use of this power will be by the Union Cotton Mills, which will discard steam-power in order to adopt electricity. Probably 10,000 horse-power is available at the shoals. Thomas C. Duncan is president of the two companies named, as well as of the Buffalo Cotton Mills, the Union and Buffalo plants having an aggregate capital of \$1,700,000. It is understood that Mr. Duncan and associates contemplate building additional cotton mills.

To Manufacture Fine Yarns.

J. A. Abernethy of Lincolnton, N. C., has let contract for the erection of a building to accommodate 12,000 spindles, which he announced in February was his intention to install, as was mentioned in the Manufacturers' Record. L. W. Cooper of Charlotte, N. C., has the contract to erect the building, and is now manufacturing bricks for the structure. The D. A. Tompkins Company, also of Charlotte, is the engineer in charge. Mr. Abernethy's mill will manufacture fine yarns—Nos. 40 to 80—from long-staple cotton, both peeler and Egyptian. The plant will cost about \$150,000.

The Cotton Movement.

In his report for April 24 Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that the amount of cotton brought into sight during 236 days of the present season was 9,918,127 bales, an increase over the same period last year of 228,027 bales. Exports were 6,120,420 bales, an increase of 300,603 bales. Takings by Northern spinners were 1,533,066 bales, a decrease of 338 bales; by Southern spinners, 1,534,703 bales, an increase of 166,643 bales.

Will Enlarge Next Year.

Several reports have been current recently regarding the erection of an additional mill by the Griffin Manufacturing Co. of Griffin, Ga. The facts are that the company does contemplate adding 10,000 spindles and about 400 looms, but has no intention of undertaking the improvement until 1904. The plant at present has an equipment of 16,336 ring spindles and 593 looms.

Textile Notes.

Marble Falls (Texas) Water & Power Co. will establish a cotton mill. It has secured unfinished buildings, which will be completed and equipped with modern textile machinery.

Chas. C. Vaughn, Box 154, Winston, N. C., wants information on the manu-

facture of mattresses and bed comforts, approximate cost of the required machinery and other details.

The Board of Trade at Taylor, Texas, is endeavoring to establish a cotton mill. A general meeting of the business men of the city and vicinity will be held May 9 to consider plans for a permanent organization.

It is reported that Lionel Stuyvesant of Liverpool, England, contemplates building a cotton-cloth mill at Lexington, Ky. Mr. Stuyvesant claims to be engaged in cotton manufacture in England. He was registered at the Palace Hotel, Lexington, last week.

Efforts are being made for the organization of a cotton-mill company at Salley, S. C. Northern capitalists offer to furnish \$75,000 if local investors will subscribe to \$25,000 worth of the stock. The business men are endeavoring to meet the terms of the proposition.

Winder (Ga.) Cotton Mill's stockholders held their annual meeting during the week. They declared a semi-annual dividend of 4 per cent. and passed \$23,000 to surplus account. It was decided to increase capital by \$20,000. The company now has 5000 spindles and 258 looms.

Messrs. E. A. Smith, J. P. Wilson and Jeremiah Goff have incorporated at Charlotte, N. C., the Haskins Cotton Mill Co., with authorized capital of \$500,000, of which amount \$37,000 is said to have been subscribed. Local reports say that 15,000 spindles and 450 looms are contemplated.

Newberry (S. C.) Knitting Mill will issue preferred stock to the amount of \$15,000, its present capital being \$25,000. L. W. Floyd has been elected president, and authorized to make improvements to the plant, which now has seventy-five knitting machines and dyeing equipment.

J. C. Harrington, lately mentioned as proposing to organize company at Little Rock, Ark., for the erection of a cotton mill, contemplates an equipment of 6000 spindles and 200 looms, for manufacturing towels, napkins and similar products. Mr. Harrington comes from New York, where he was engaged in cotton manufacture. His Little Rock address is 202 Board of Trade Building.

QUOTATIONS OF COTTON YARNS.

By Buckingham, Paulson & Co., New York, Philadelphia and Chicago, April 28.

No. 10s-1 and 12s-1 warps.....	15 1/4 @ 16 1/4
No. 14s-1 warps.....	15 1/4 @ 16
No. 16s-1 warps.....	16 @ 16 1/2
No. 20s-1 warps.....	18 @
No. 22s-1 warps.....	18 1/2 @
No. 26s-1 warps.....	19 @
No. 4s to 10s yarn.....	14 1/2 @
No. 12s-1.....	15 @ 15 1/4
No. 14s-1.....	15 1/2 @ 16
No. 16s-1.....	16 @ 16 1/2
No. 20s-1.....	17 1/2 @
No. 22s-1.....	18 @
No. 26s-1.....	19 @
No. 8s-2 ply soft yarn.....	15 @
No. 10s-2 ply soft yarn.....	15 1/2 @
No. 12s-2 ply hard.....	15 1/2 @
No. 10s-2 ply hard.....	15 1/4 @
No. 12s-2 ply hard.....	15 1/2 @
No. 14s-2 ply.....	16 @
No. 16s-2 ply.....	16 @ 16 1/2
No. 20s-2 ply.....	17 1/2 @
No. 22s-2 ply.....	18 1/2 @
No. 26s-2 ply.....	19 1/2 @
No. 30s-2 ply yarn.....	20 1/2 @ 21
No. 40s-2 ply.....	24 1/2 @ 25
No. 8s-3, 4 and 5 ply.....	15 @
No. 20s-2 ply chain warps.....	17 1/2 @ 18
No. 24s-2 ply chain warps.....	18 1/2 @
No. 26s-2 ply chain warps.....	19 1/2 @ 20
No. 30s-2 ply chain warps.....	20 1/2 @ 21
No. 16s-3 ply hard twist.....	16 1/2 @
No. 20s-3 ply hard twist.....	17 1/2 @ 18
No. 26s-3 ply hard twist.....	20 @

Cottonseed-Oil Notes.

The charter has been granted for the erection and operation of a \$15,000 oil-mill plant at Harmony Grove, Ga., and the erection of the same will soon be put under way.

The Shelby County Cotton Oil Co. of Center, Texas, has been chartered, with a capital of \$30,000, for establishing a cottonseed-oil mill. H. S. Runnels is president; R. J. D. Ellington, vice-president,

and J. W. Saunders, secretary-treasurer.

It is reported that a committee of five, representing twenty independent cotton-oil plants in Georgia and Alabama, visited Columbus, Ga., last week to look over sites for a large cotton-oil refinery to cost \$500,000. It has been settled that either Columbus or Albany, Ga., will get the enterprise, both sites offering inducements.

The stockholders of the Coldwater Cotton Oil Co. of Coldwater, Miss., met in that place on the 20th inst and organized, with a fully-paid-up capital of \$40,000. The following officers were elected: F. F. Venzey, president; M. S. Dougherty, vice-president; A. L. Jago, secretary and treasurer. A charter has been applied for, and the work of construction upon an up-to-date mill will be pushed rapidly.

The Farmers' Cotton Oil Co. of Okolona, Ark., has been organized, with a capital of \$75,000, of which \$25,000 has been paid in. Work will begin at once on the necessary buildings and machinery installed at the earliest date, so as to be ready for the opening of the coming season. The officers of the company are T. M. East, Jr., president; John Hays, vice-president; C. E. Cobb, secretary, and George Spencer, treasurer.

The following are official quotations on cottonseed and cottonseed products as posted at the Cotton Exchange in New Orleans on the 27th inst.: Prime refined oil, in barrels, 42½ cents per gallon; off refined, in barrels, 37 cents per gallon; prime crude, loose, 35½ to 36½ cents per gallon; off crude, loose, 25 to 30 cents per gallon; prime cottonseed cake, \$24 to \$24.50 per ton of 2240 pounds; off prime cottonseed cake, nominal; prime cottonseed meal, \$25.12½ per ton of 2240 pounds; off prime cottonseed meal, nominal; soap stock, \$1.12½; linters, per pound, choice, 4½ cents; A, 4½ cents; B, 3½ cents; C, 3½ cents; cottonseed, in sacks, delivered at New Orleans, per ton of 2000 pounds, \$14; in bulk, delivered at New Orleans, per ton of 2000 pounds, \$13.

Quotations on April 25 at the New Orleans Maritime and Merchants' Exchange, Limited (April shipment from the mills), were as follows: Prime cake, \$24 per long ton, ship's side; off cake, \$22 to \$23 per long ton, ship's side, according to quality; prime meal, \$25.25 per long ton, ship's side; off meal, \$21 to \$23.50 per long ton, ship's side, according to quality; prime crude oil, 34½ cents per gallon loose f. o. b. mill; off crude, 27 to 30 cents per gallon loose f. o. b. mill, according to quality; prime refined oil, 39½ cents nominal per gallon loose in barrels, ship's side; off refined oil, 35½ to 36 cents per gallon loose in barrels, ship's side; soap stock, \$1.17½ per 100 pounds, basis 50 per cent, fatty acid; linters, per pound, f. o. b. mills flat—A, 3½ cents; B, 3 cents; C, 2½ cents; low linters, 1½ to 2 cents per pound f. o. b. mill flat, according to quality.

New Steamship Company.

Advices from New York report that the American Smelting & Refining Co. has organized the American Smelters Steamship Co., with \$2,000,000 capital, to conduct a general freight transportation business between Galveston, Texas, and ports in Mexico, Central America, South America and elsewhere. The officers are S. W. Eccles, vice-president and general manager; Isaac Guggenheimer, treasurer; F. W. Hills, comptroller; H. B. Tooker, secretary; J. K. MacGowan, manager at Galveston and general purchasing agent.

The saw and planing mill of the Bond & Bond Co. at Neoga, Fla., was destroyed by fire on the 22d inst. The plant cost over \$40,000, and was insured for \$15,000.

LUMBER.

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

LUMBER MARKET REVIEWS.

Baltimore.

Office Manufacturers' Record, Baltimore, Md., April 29.

Under more favorable weather conditions the movement in the local lumber market has shown some improvement during the past week. The general market, however, is rather quiet, and the local demand from builders is still moderate, owing to the unsettled state of labor, builders and carpenters still being apart in their views. From other local wood-working concerns there is a steady demand, although the volume of business is not heavy. Of the various woods on the market, North Carolina pine still holds its own; the demand is steady from out-of-town dealers, and in a general way there is a good trade in progress with all the consumptive markets in the Middle States and Northern and Eastern sections. Prices still continue firm, with no change in the general list of values. Cypress is in good request, with receipts light and values steady. White pine is quiet, with a light supply, and prices unchanged. Poplar still continues in fairly active demand, and mills are generally well supplied with orders. Both the domestic and foreign inquiry for poplar is good, and prices satisfactory. In all hardwoods the movement is of moderate volume, and in a local way there is an improvement in the demand, while foreign exporters report a more favorable tone as to the European demand. Prices for oak, ash, walnut and other woods are well maintained.

Charleston.

[From our own Correspondent.]
Charleston, S. C., April 27.

The tone of trade throughout the lumber industry is fairly active, and the demand is generally steady, with no change in prices. The reports from milling sections throughout the State are encouraging, and the development of yellow pine, cypress and hardwoods is most decided. Mills are generally well supplied with orders, and with settled weather the output will be materially increased. During the past week the steamship S. T. Morgan cleared from this port for Philadelphia with 1,325,000 feet of yellow-pine lumber. The total shipments since September 1 aggregated 46,905,964 feet, of which 45,597,464 feet were coastwise and 1,308,500 feet were foreign, against 45,766,825 feet foreign and coastwise during the same period in 1901-1902. At Georgetown the lumber trade is showing considerable activity, and among all the mills there is a good supply of orders coming to hand. The Atlantic Coast Lumber Co.'s plant is turning out lumber at a greater rate than ever before, and shipments are improving. The planing mill of the Gardner & Lacey Lumber Co. at Georgetown, which was destroyed by fire last January, has been replaced by a mill of double the former capacity. The new mill has the latest improved wood-working machinery, and is one of the most complete plants of its kind in the South. The machinery was started on the 18th, and the mill will now run on full time, as long-standing and increasing orders are on file which must be disposed of. Probably the largest tree growing in this State was discovered recently in a swamp on the North Santee river by the cypress-timber cutters of the Gardner & Lacey Lumber Co. It is a cypress tree fourteen feet in diameter at the point where it will be cut from the stump, and extending to

the limbs will produce a log sixty-odd feet in length when felled. From the number of rings around the trunk experienced timber men estimate that it is about 1900 years old.

Brunswick.

[From our own Correspondent.]
Brunswick, Ga., April 28.

The outward movement of lumber for the past week was somewhat stronger than for some time. The coastwise shipments to Boston and New York by the regular steamship lines amounted to 1,081,078 superficial feet, the Mallory steamer taking 353,057 feet of lumber, 64,664 superficial feet of switch ties and 211,376 superficial feet of railroad cross-ties (or 4804 pieces), making a total of 629,097 superficial feet, the Clyde to Boston moving 440,541 feet of lumber and 111,440 feet of railroad ties, a total of 451,981. The coastwise movement by sail tonnage shows no present or future indication of letting up; on the other hand, recent chartering of tonnage indicates a heavier movement to Baltimore, Philadelphia and New York. Market prices show a decided steadiness; orders are reported as being plentiful. The foreign movement for week shows only one shipment—52,000 feet of sawn timber and 427,000 feet of boards, deals and planks to Portugal, and the foreign market is slack at present, resulting in but few charters being made and reported. Several prospective deals in piling are reported as being about to be closed. Three large shipments were reported from Fernandina, one going to Rotterdam, others coastwise. The activity at that port is very pronounced. At Satilla river mills four large shipments of lumber reported by Hilton-Dodge Company. Two large foreign shipments reported from Darien—one to Portsmouth, England, consisting of 533,305 feet, and the other to London with 2,276,000 feet. Further reports indicate a heavier movement for May. Freight quotations from the South Atlantic ports show a basis from Brunswick to New York with lumber at \$5.50, and railroad ties at 17½ to 18½ cents.

Pensacola.

[From our own Correspondent.]
Pensacola, Fla., April 27.

The receipts of timber during the past week have been quite liberal, and, in fact, there has been a glut on the market of small sizes and short lengths, so that for this description of timber prices were easier. For lengths of 30 feet and up there has been a good demand, and the market steady at 17½ to 18 cents per cubic foot. Advices from European markets are more favorable, and the small stocks abroad are likely to make a steady demand during the summer months. During the week eight or ten vessels arrived to load timber, while the clearances for the week exceeded the arrivals. Several contracts for future delivery abroad were made last week by exporters. Among the charters reported for the week were the Dutch steamer Alpha, 1374 tons, from Gulfport, Miss., to Rotterdam with timber on private terms, May; Spanish steamer Eolo, 2369 tons, from the Gulf to Continent or United Kingdom with timber at \$1.3, May; British steamer Elswick Park, 2208 tons, from Mobile to two ports Continent with timber at \$2.6, May, and British schooner Arthur M. Gibson, 317 tons, from Gulfport, Miss., to Sagua with lumber at \$6.75. The clearances of lumber and timber last week from this port aggregated 9,860,000 superficial feet, distributed as follows: London, 966,000 feet of lumber; Rotterdam, 900,000 feet of lumber and 800,000 feet of sawn timber; Antwerp, 500,000 feet of lumber; Manchester, 792,000 feet of lumber;

Grangemouth, 2,096,000 feet of sawn timber; Marseilles, 369,000 feet of lumber and 1,500,000 feet of sawn timber; Buenos Ayres, 7,000,000 feet of lumber; Rosario, 965,000 feet of lumber and 152,000 feet of sawn timber, and Belize 135,000 feet of lumber.

Memphis.

[From our own Correspondent.]
Memphis, Tenn., April 27.

The strained relations existing between supply and demand in hardwood lumber circles here have not shown any material improvement during the past few days, and the whole situation easily favors the manufacturer. The offerings are still considerably below the requirements of the trade, and the indications point to a continuance of this condition for some time to come. The demand is still active, and the trade agencies report that the number of buildings now projected in all portions of the country, together with the activity chronicled in all lines of manufacturing industry, argue a continuance of this condition. The market is now quite strong at the recently-quoted figures. There have been no further advances, but the trade are of the opinion that prices will probably work higher because of the relative lightness of offerings of dry stock and the fine demand for what is available. The forward delivery sales are increasing to some extent, though they are not large, by any means, for the reason that the manufacturers do not care to obligate themselves to furnish stock which they may not be able to manufacture in the meantime. The entire cut of some mills has been sold ahead until the end of the year in some lines, but the general disposition is not to take such a step. The timber supply is now more adequate than it has been for some time because of the improved traffic conditions. The logging service has been re-established on the Yazoo & Mississippi Valley branch of the Illinois Central, and some of the Western roads are bringing in timber from Arkansas. The river receipts are increasing slightly, and, given fair weather, the production of hardwood lumber here during the month of May will be much more liberal than it has been during the past two or three months. The R. J. Darnell Lumber Co. is establishing a large mill at Darling, Miss., which will have a capacity of 35,000 feet per day. The company owns 10,000 acres of timber lands in that section, and the timber is being gotten out now by means of a steam skidder, so that when the plant is completed it will have plenty of timber to keep it running at full capacity for months to come.

Lumber Notes.

The Womack-Daniel Lumber Co. of Caldwell, Texas, has been organized by M. L. Womack and C. J. Daniel of Caldwell. The company has purchased the two lumber-yards at that place, and will consolidate the business.

A shingle-manufacturing company with a capital of \$100,000 was incorporated last week at Wilmington, N. C. Sixty thousand dollars has been paid in. The company will be known as the New Hanover Shingle Mills of Wilmington.

The spoke and hub factory which was located at Florence, Ala., a few weeks ago will start up at an early date. Hands are at work repairing the old building of the Pump & Lumber Co., which were bought for the use of this factory.

The Loomis & Hart Manufacturing Co. of Chattanooga, Tenn., has purchased a site for its new planing mill, paying, it is stated, \$15,000 for the property. The new mill will cost about \$20,000, and will be one of the most complete in the South.

Mr. George K. Smith of New Orleans and J. M. Russ of Hattiesburg, Miss., have purchased the stock of the Saratoga Lumber Co. of Saratoga, Miss. Mr. W. S. Welch was selected by the new board of directors as manager, and will take charge at once.

It is reported that the deal for the two big lumber mills of Simpson & Co. of Bagdad, Fla., together with towboats, barges and 100,000 acres of virgin timber lands, has been closed. Illinois and Michigan capitalists have had an option on this property for two months, and are said to be the purchasers.

The Atlantic Lumber Co. of Tavares, Fla., last week sold 40,000 acres of land in Lake county, Florida, together with camp equipment, two towboats and a logging road nine miles in length, extending from the St. John's river back into the timber lands, to T. V. Cashin and J. A. Maguire of Jacksonville, Fla.

The big saw and shingle mills of William J. Gooding, Jr., at Gooding, Ga., were destroyed by fire last week, together with \$5,000 shingles and 55,000 feet of lumber. The loss is estimated at \$20,000, with no insurance. The planing mill and dry-kilns were not burned. It is understood that the plant will be rebuilt.

The large saw-mill of the Charleston Lumber Co. located at Brickyard, several miles from Beaufort, S. C., will be completed in about two weeks. The company has acquired large timber rights, and the output of its plant will be 35,000 feet daily. Another mill of 60,000 feet capacity will be erected shortly by the same company in the vicinity of Brickyard.

The largest walnut log ever taken out of the Eastern Kentucky mountain forests has just been taken from Cross Fork of Kentucky river, west of Mayking, overland across the mountains to Jackson, Breathitt county, to the Cincinnati markets. The log was nearly six feet in diameter and sixteen feet long, and it required eight large yoke of oxen to "snake" it over the mountains. It was bought for \$1600 from Joe Hale.

At Moultrie, Ga., last week an important deal in saw-mill property was closed. John W. Zuber of Atlanta purchased of J. M., R. D. and M. P. Monroe eighty-five shares of stock in the Sumner & Pounds Lumber Co. The price paid was \$18,000, or more than \$200 per share. This company was organized only a few months ago with 185 shares at \$100 each. Almost before the mill had been put in operation their block of stock had been sold at more than 10 per cent. above par.

The Consolidated Naval Stores Co. has added to its holdings of timber lands in Florida 100,000 acres of land in Lee county by the purchase of the charter and holdings of the Beach Land Co. This company was organized last fall with W. D. Beach of Waycross, Ga., as president, and D. H. McMillin as vice-president. The sale took effect on the 23d inst., \$90,000, it is stated, being the purchase price. The Consolidated Company now holds about 2,000,000 acres in the State of Florida.

Mr. H. O. Clement of the Minnesota Lumber Co. of Valdosta, Ga., writes to the Manufacturers' Record as follows: "The name of the railroad we are to build from River Junction, Fla., to Apalachicola, Fla., is the Apalachicola Northern Railroad. The officers are: President, C. B. Duffy, Worcester, Mass.; first vice-president, H. O. Clement, Valdosta, Ga.; second vice-president, B. H. Beverly, Apalachicola, Fla.; secretary, J. H. Trump, and treasurer, W. A. Griffith, Valdosta, Ga. The line will be about seventy miles long."

PHOSPHATES.

Phosphate Markets.

Office Manufacturers' Record,

Baltimore, Md., April 29.

The local phosphate situation is quiet, with very little rock of any description offering. Receipts have been more liberal during this month, and fertilizer manufacturers are well supplied. Among the phosphate charters reported last week was the steamer Vincenzo Bonanno, 2214 tons, from Pensacola to Leghorn on private terms, May; steamer Miles Coverdale, 1475 tons, from Coosaw to Belfast at 10% May; schooner Augustus Welt, 1112 tons, from Charlotte Harbor to Baltimore at or about \$2.50; schooner Independent, 1071 tons, from Port Tampa to Baltimore at \$2.50; schooner Mary Lee Patten, 522 tons, from Charleston to Baltimore at \$2.50, and schooner Samuel H. Hathaway, 906 tons, from Port Tampa to Baltimore at \$2.50. From the above charters it will be seen that the movement in mining sections will be considerably accelerated during May, and at the moment the indications point to greater activity throughout the Southern phosphate belt. In Florida shipments are heavier than usual, and the market steady. South Carolina miners are busy, with a good domestic and foreign movement of rock. The reports from Tennessee are very favorable, prices ruling at Mt. Pleasant as follows: 70 to 72 per cent. rock \$2.70, 75 per cent. \$3.25, and 78 per cent. \$3.75. There is a good domestic and foreign demand, and miners are rapidly increasing the output under more favorable weather conditions. In reviewing the phosphate market at home and abroad La Phosphate of Paris, France, under date of the 15th inst., says: "Easter holidays have slightly affected business, the necessary retardation of which will be followed by a renewed activity. Shipments, however, are made in a normal condition, and the market still holds to previous quotations, with a decidedly well-designed tendency to advance. The actual condition is decidedly favorable to sellers, but at the same time is not unfavorable to buyers, as the manufacturers of superphosphates have pursued in an equal manner in the sale of their products of high fertilizers—the advance movement pronounced in materials of every class and from every resource. There is nothing new to note this week, and consequently we confine ourselves to confirming the general advance of the phosphate market." Of the American market La Phosphate says: "There is attention given in the phosphate centers to the interviews between the M. J. Hull group and stockholders of the Land Pebble Phosphate Co. for the acquisition of the mining operations and materials of

this latter company. But it is not to be considered that work in these mines will be renewed immediately. Many months will elapse certainly before the works are reconstructed and new material is acquired and installed. In view of the abundant demand, and in view of the rapid exhaustion of some beds, it would be necessary, however, that works at the Land Pebble Company should be made without delay. But as human forces are limited, it is necessary to wait. The market will continue to hold as before. We are assured that new transactions have been concluded in France, England and Germany at a price exceeding last quotations. This refers to phosphates of Florida and Tennessee. Shipments are regularly made, and the operating companies, in spite of difficulties encountered in the scarcity of stocks, are executing their orders 'to the letter.' European customers of American phosphates are being satisfied, and will not have to complain of being curtailed by similar causes."

Fertilizer Ingredients.

The movement in ammoniates has been fairly active during the past week, and the market showing considerable strength for spot and nearby futures, while futures beyond six months are very strong. Western packers report stocks light and prices well maintained.

The following table represents the prices current at this date:

Sulph. of ammonia (gas), spot.	\$3 12 1/2 @ 3 15
do. foreign prompt.	3 32 1/2 @ 3 35
Nitrate of soda, spot Balto.	2 00 @ 2 05
Blood	2 65 @ 2 67 1/2
Azotline (beef)	2 57 1/2 @ 2 60
Azotline (pork)	2 57 1/2 @ 2 60
Tankage (concentrated)	2 47 1/2 @ 2 50
Tankage (8 and 20)	2 62 1/2 & 10 1/2 @ 2 65 & 10
Tankage (7 and 30)	20 50 @ 21 00
Fish (dry)	32 50 @ 35 00

Phosphate and Fertilizer Notes.

The Berlin-American Drug Co. of St. Louis has been chartered, with a capital of \$50,000, by J. H. Hallet, M. W. Cattle, M. L. Eldridge and others.

J. Ross Hanahan, H. H. Fricken of Montgomery, Ala., and others have organized the Macon Fertilizer Co. of Macon, Ga., and will establish a factory with

territory and to be allowed to put an additional dredge to work in that territory. Stono river is said to be a good field for the dredging of phosphate rock.

The Atlantic Kaolin Co. at Lake Harris, in Lake county, Florida, is now in full operation, and is preparing some large shipments, turning out from fifteen to twenty tons of kaolin daily. The Richardson Mining Co., four miles distant, is also in full operation. Bloomfield is the center of the kaolin fields.

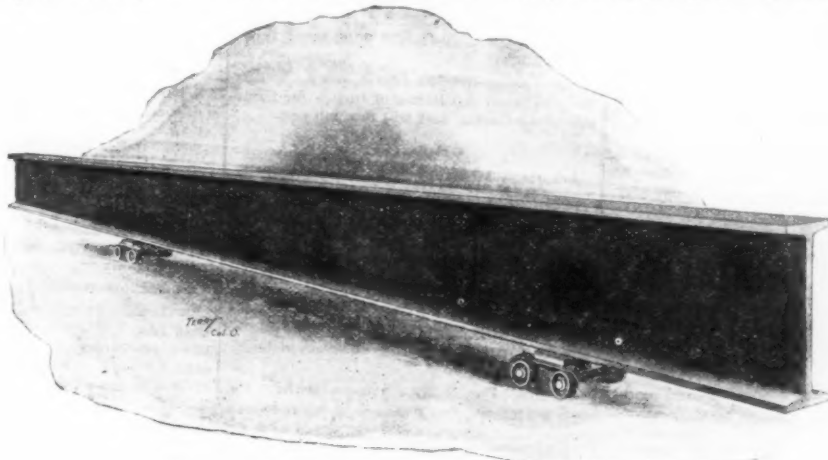
Mr. Fletcher L. Clawson of Ashwood, Maury county, Tennessee, purchased last week the Pointer place, containing about 500 acres, from R. H. Kittrell, paying \$20,000 for the tract. A bed of splendid specimen of phosphate is located on the farm, but has never been worked. Mr. Clawson will at once place machinery and a force of men at work mining the rock.

Shipments of phosphate rock last week from Port Tampa were unusually brisk. The Austrian steamship Marianne cleared for Genoa, Italy, with 3850 tons, valued at \$23,100; British schooner Sir Richard Granville for Stettin, Germany, with 368 tons, the Danish steamship Nordhavet with 3100 tons, and the British steamship Laurelwood with 3200 tons also cleared for Stettin.

The annual conventions of the American railway master mechanics and of master car builders will be held at Mackinac Island, June 17-24.

The Gem Box Truck.

There are numerous branches of industrial activity in mills, factories, warehouses, docks, wharves, depots, stores, etc., where it is frequently necessary to move heavy weights from one point to another. Many of these depend on trucks for this service, it not being convenient or advisable to install hoisting and conveying equipment. Because of the demand for trucks of this character, manufacturers have turned their attention to designing and building trucks of a minimum size to handle a maximum of size and weight. The Gem Box Truck is one of the most



TWO GEM TRUCKS UNDER A LOAD OF 5000 POUNDS.

successful of these on the market, its possibilities being amply demonstrated by the accompanying illustration, showing two Gem trucks under a load of 5000 pounds. The Gem Box Truck will handle boxes, machinery, iron, steel and other products. It is built of steel and cast iron, with or without rubber tires or roller bearings, and weighs but forty pounds. Its wheels are four, five and six inches in diameter; it tilts readily for box handling, and is so balanced and perfected that practically no effort is required to push it over the floor, even with a heavy load. The City Forge and Iron Works of Dayton, Ohio, manufactures this truck, and is prepared to send further particulars to interested buyers of this kind of equipment.

capacity of 30,000 tons of fertilizer annually.

The schooner Marie F. Cummins cleared last week from Charleston, S. C., for Barren Island with 586 tons of phosphate rock, and the schooner Geneva for Weymouth with 1235 tons.

It is stated that Messrs. Frank N. Watkins, J. M. Finn and others have purchased property at Dublin, Ga., and have organized a creosote and chemical company, with a capital stock of \$80,000. They will erect an extensive manufacturing plant on the property.

The Stono Phosphate Co. of South Carolina, of which Mr. Hanahan is president, has asked for a license to work more ter-

CONSTRUCTION DEPARTMENT.

THE MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

*Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery, Proposals and Supplies Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the Manufacturers' Record.

It often occurs that the organization of a new company in a town is not known by the postmaster, and hence letters addressed to the company are returned marked "not known." The Manufacturers' Record reports the first organization of all companies, and our readers, in seeking to get into communication with them, should be very careful in deciding how to address them, and it is often advisable to add the names of one or more incorporators as an aid to the postmaster in delivering mail.

ALABAMA.

Birmingham—Plow Factory.—J. C. Bolling of Haysville, Ky., is investigating Birmingham as site for plow factory.

Birmingham—Powder Mill.—Reports state that the Dupont Powder Co. of Wilmington, Del., manufacturers of powder and dynamite, will establish \$300,000 plant at Boyles, near Birmingham, where company owns considerable property. It is also reported that the Rand Powder Co. will establish plant in connection with the above works for manufacture of shells.

Dadeville—Oil Mill.—Dadeville Oil Mill is improving mill by installation of another 16-box oil-press linter and other machinery, making capacity forty tons per day.

Decatur—Cornice and Roofing Works.—Decatur Cornice & Roofing Co. will erect new building.

Florence—Furnace.—Sloss-Sheffield Steel & Iron Co. (colliers at Birmingham) has blown in its Philadelphia furnace, previously reported as being relined and repaired; \$50,000 was expended.

Gadsden—Radlador Plant.—Central Foundry Co., 116 Nassau street, New York, will use its foundry plant at Gadsden for the manufacture of radiators. Cupola, shafting, building, etc., are in good condition, and very little work will be required to put plant in operation.

Huntsville—Electric Plant.—Huntsville Railway, Light & Power Co. will make some improvements to its electric-power plant. Address Superintendent Coryell.

ARKANSAS.

Burma—Coal Mines.—Franklin Bache of Fort Smith, Ark., has purchased the Missouri and Arkansas coal mines at Burma for \$40,000 and will operate same.

Crawfordsville—Telephone System.—Crittenden County Telephone & Telegraph Co. has been incorporated, with capital of \$200, by W. Z. Bunn, C. L. Campbell and Hugh Chambers.

El Dorado—Lumber Mills.—Kinard Lumber Co. has been incorporated, with capital of \$20,000, for manufacture of lumber. C. P. McHenry is president; J. A. Rowland, vice-president, and J. L. Kinard, secretary-treasurer.

Little Rock—Cotton Mill.—J. C. Harrington, lately mentioned as proposing company to build cotton mill, contemplates an equipment of 6000 spindles and 200 looms to manufacture towels, napkins, etc.; address, 202 Board of Trade Building.

Okolona—Cotton-oil Mill.—Farmers' Cotton Oil Co. has been incorporated, with capital of \$75,000, for erecting cottonseed-oil mill. T. M. East, Jr., is president; John Hays, vice-president, and C. E. Cobb, secretary.

Paragould—Mercantile.—Chartered: Glasscock-Smith Company, with capital of \$12,000, by E. J. Smith, A. H. Glascock and others.

Tuckerman—Gin.—Tuckerman Gin Co. has been incorporated, with capital of \$15,000, by George W. Yelverton (president), R. F. Dunn, J. W. Scally and others.

FLORIDA.

Bagdad—Timber Lands, Saw-mill, etc.—Illinois and Michigan parties have purchased two lumber mills and 100,000 acres of timber lands of Simpson & Co. at Bagdad.

Jacksonville—Timber Lands.—T. V. Cashen and J. A. Maguire have purchased 40,000 acres of timber lands in Lake county, together with camp equipment, logging road, etc., and will inaugurate extensive developments.

Jacksonville—Cork, etc., Factory.—W. S. Barnett, G. W. Shook, F. S. Chaffee and Gustave Muller have incorporated the Non-Refillable Bottle & Cork Co., with capital of \$50,000, for manufacturing patent non-refillable bottles, bottle stoppers, corks, etc.

Jacksonville—Medicine Factory.—Wm. W. Cleveland, F. T. Christie, Frank C. Groover and others have incorporated Afco Chemical Co., with capital of \$50,000, to continue operation of W. W. Cleveland's medicine factory.

Key West—Real Estate.—Monroe Investment Co., with capital of \$5000, has been incorporated for dealing in real estate by Wm. H. Malone, Jr., Chas. H. Thompson and Wm. T. Archer.

Ocala—Improvement Company.—Northern & Southern Co. has been incorporated, with capital of \$30,000, for dealing in and improving real estate, manufacturing products of wood, etc., by D. W. McLaury, F. R. Pashley and L. J. Roers.

Palm Beach—Packing Company.—Chartered: Boynton Packing Co., with capital of \$10,000, by H. B. Winnay, W. H. Cox and N. A. Chase.

Pensacola—Fertilizer Factory.—Curry Fertilizer Co. of Louisville, Ky., has purchased site at Pensacola and will build large fertilizer factory.

Pine Castle—Timber Lands.—F. A. Addins has purchased 18,000 acres of turpentine lands near Pine Castle, and will develop same.

GEORGIA.

Atlanta—Medicine Factory.—Edgar C. Jones, D. W. Manley and others have incorporated Blackweed Medicine Co., for manufacturing patent medicine, with authorized capital of \$100,000.

Atlanta—Building-material Factory.—G. G. Glower, Harry Cantey and James T. Field have incorporated the Glower Company, with capital of \$5000, and privilege of increasing to \$100,000, for manufacturing all kinds of building materials.

Atlanta—Flour Mill.—Atlanta Milling Co. has contracted for remodeling flour mill to the gyrator system.

Atlanta—Telephone System.—Standard Telephone Co., reported recently as reorganized and to make extensive improvements, will be known as the Atlanta Telephone & Telegraph Co., and is planning long-distance connections with cities throughout Georgia and adjoining States. C. J. Simmons will be president and general manager.

Atlanta—Water-works.—City has decided by popular vote to issue \$400,000 of water-works bonds previously reported. Address "The Mayor."

Barney—Cotton Gin.—John Berryhill will install cotton gin.

Brunswick—Planing Mill and Variety Works.—Noble & Parker are erecting planing mill and variety works.

College Park—Electric-light Plant.—Efforts are being made for installation of electric-light plant. Address B. L. Willingham, mayor.

Columbus—Candy Factory.—Whitaker Candy Co. of West Point, Ga., will remove its factory to Columbus; Kern & Loeb Co.

will erect new three-story brick building to be occupied by the company.

Columbus—Pants, etc., Factory.—Standard Manufacturing Co. of Atlanta, Ga., is investigating with a view to establishing pants, shirt and overall factory at Columbus.

Dublin—Chemical Plant.—Frank N. Watkins, J. M. Finn, T. J. Pritchett, C. W. Brantley and others are organizing \$80,000 company for establishing creosote and chemical plant.

East Point—Electric-light Plant.—Company will probably be organized for installation of electric-light plant. Address R. F. Thompson, mayor.

Flintstone—Phosphate Mines.—A. D. Adair and McCarty Bros. of Atlanta, Ga., and Chattanooga, Tenn., fertilizer manufacturers, will open up phosphate mine near Flintstone.

Gooding—Lumber Mills.—William J. Gooding, Jr., will rebuild saw and shingle mills, reported burned at loss of \$20,000.

Hogansville—Electric-light Plant.—Hogansville Light & Power Co., M. K. Wood, manager, is installing electric plant for lighting city.

Louisville—Electric-light Plant.—City has decided by popular vote to issue \$20,000 of bonds for water-works and electric-light plant. Address "The Mayor."

Macon—Fertilizer Factory.—J. Ross Hannah, H. H. Ficken of Montgomery, Ala., and others have organized Macon Fertilizer Co. to establish factory with capacity of 30,000 tons of fertilizer annually.

Madison—Water-works.—City contemplates constructing system of water-works; S. F. Beckham, treasurer.*

Marietta—Oil Mill.—Marietta Ice Co. will increase capital stock and install cottonseed-oil mill in connection with its ice plant.*

Marietta—Marble and Granite Company.—Butler Marble & Granite Co. has been incorporated, with R. E. Butler, president; John P. Cheney, vice-president, and B. A. Butler, secretary-treasurer.

Nickville—Cotton Gin.—C. H. Allen will install cotton gin.

Sandersville—Electric-light Plant and Water-works.—City has decided by popular vote to issue \$30,000 of bonds for municipal electric-light plant and water-works previously reported. Address Byrd B. Lovett, Jr.

Savannah—Piano Factory.—McArthur & Sons Co. will install machinery for manufacture of pianos.

Sparta—Oil Mill.—Machinery has been purchased and arrangements made for installation of 40-ton cottonseed-oil mill. R. F. Bryan, Union Point, Ga., is president.*

Winder—Cotton Mill.—Winder Cotton Mill will increase capital by \$20,000.

KENTUCKY.

Campton—Oil Wells.—Red River Valley Oil & Gas Co. has been incorporated for developing 3000 acres of oil and gas lands.

Cloverport—Cannery.—Polk Canning Co. of Greenwood, Ind., is said to have completed arrangements for establishing \$10,000 cannery at Cloverport.

Lexington—Cotton Mill.—It is reported that Lionel Stuyvesant, a cotton manufacturer of Liverpool, England, contemplates establishing a cotton-cloth mill at Lexington. He has registered at Palace Hotel, Lexington.

Louisville—Cornice, etc., Works.—Al Bourlier, Harry Murray, Emile B. Bourlier, W. J. Hogan and others have incorporated the Louisville Cornice, Roofing & Heating Co., with capital of \$10,000.

Louisville—Paper Company.—Smith & Vaupel Company has been incorporated, with capital of \$15,000, for dealing in paper, etc., by Llewellyn Smith, Charles Vaupel, E. M. Browder and others.

Louisville—Grain Elevator.—D. X. Murphy & Bro. have made plans for grain elevator and warehouse for Edinger & Co.

Louisville—Distillery.—Taylor & Williams, distillers, have incorporated, with capital of \$30,000.

Madisonville—Flour Mill.—Madisonville Flouring Mills has been incorporated, with capital of \$10,000, by T. P. Milligan, C. F. Lattimore and T. W. Peace.

Marion—Fluor-spar Mine.—Work has commenced on erection of 100-ton separating plant at Columbia zinc and fluor-spar mines in Crittenden county.

Princeton—Machine Shops.—Illinois Central Railroad, J. T. Harahan, second vice-

president, Chicago, Ill., will, it is reported, remove its Henderson (Ky.) shops to Princeton and enlarge same; will also erect coal chutes.

Sullivan—Coal Mine.—W. J. Deboe and others have purchased Lamb coal mines, and will install additional machinery for increasing output.

LOUISIANA.

Algiers—Dry-dock.—Good Intent Dry-Dock Co. will reorganize, with capital of \$150,000, and expend \$100,000 in constructing new dry-dock 300 feet long, with lifting capacity of 3000 tons.

Arcadia—Cotton Compress.—Levy Compress & Warehouse Co. will rebuild cotton compress lately burned at loss of \$30,000.

Clinton—Ice Plant.—Safety Electric Manufacturing Co. of New Orleans, La., has contracted for 10-ton ice plant to be erected at Clinton.

Coushatta—Electric-light and Ice Plant.—W. H. Flemings, representing New Orleans (La.) company, has been granted franchise for electric-light plant and ice factory at Coushatta. Company will be organized for operating the plants.

Crowley—Oil Lands.—Crowley Oil & Mineral Co., W. W. Dusen, president, contemplates making extensive improvements.

Crowley—Oil Wells.—McCormick Oil Co. has been incorporated, with capital of \$100,000, for developing oil wells. J. Frankel is president; R. P. McCormick, vice-president, and W. M. Egan, secretary-treasurer.

Jennings—Oil Wells.—Grand View Oil Co. of Beaumont, Texas, has purchased and will develop two acres of oil lands near Jennings.

New Orleans—Gas Plant.—J. Edward Addecks of Wilmington, Del., is said to be interested in construction of a series of coke ovens at New Orleans for manufacture of coke and by-products, among them illuminating gas; cost \$1,000,000. Address L. E. Lemarie, care of St. Charles Hotel, New Orleans.

Vinton—Oil Well.—Vinton Oil & Sulphur Co. has contracted with W. P. Strun for sinking a 1500-foot well; cost \$15,000.

Welsh—Oil Wells.—Thomas W. Castleman, Charles E. Buck, Wm. J. Behan and others of New Orleans, La., have purchased for development 500 acres of oil lands near Welsh.

MARYLAND.

Baltimore—Hardware Company.—Francis Albert Company has been incorporated, with capital of \$10,000, for taking over business of Francis Albert & Co. Francis Albert, Wm. W. Albert, Wm. C. Monohue and others are incorporators.

Baltimore—Pier.—Northern Central Railway will build another pier at Canton 35x120 feet; 4000 piles will be used to support the structure; A. W. Hendrix, treasurer, Baltimore.

Baltimore—Conduit System.—Chesapeake & Potomac Telephone Co. will construct conduits in the bed of North avenue.

Baltimore—Mercantile.—Florence MacCarthy Co., reported recently as incorporated with capital of \$200,000, will conduct general mercantile business, and not manufacture, as recently reported.

Baltimore—Shirt Factory, etc.—North Bros. & Strauss, manufacturers of shirts, have purchased seven-story building corner Pratt and Greene streets, which will be remodeled at cost of \$20,000, new elevators, etc., being installed. An expenditure of \$100,000 will be made in new machinery, which includes machines for manufacture of paper boxes.

Baltimore—Timber Lands.—R. E. Wood Lumber Co., reported recently as incorporated with capital stock of \$500,000 for manufacture of lumber, bricks, etc., has completed organization, electing R. E. Wood, president; G. L. Wood, vice-president and general manager; J. K. Painter, secretary and treasurer. Company has absorbed business of Robert E. Wood of Baltimore, and is said to own 60,000 acres of timber lands in West Virginia, Tennessee and North Carolina. Will begin operations about May 1, and intends to supply hardwood lumber. General offices, Continental Trust Building, Baltimore.

Baltimore—Pipe-line System.—Baltimore Refrigerating & Heating Co. has made application for privilege of extending its hot and cold air pipe-line system.

Mt. Savage—Brick Works.—Mt. Savage Enamel Brick Works will increase capacity from 500 to 1200 brick per day.

Washington, D. C.—Transportation.—Levi Woodbury, Clarence F. Normont, John Callahan and others, all of Washington, D. C., have organized Washington-Alexandria Ferry Co., with capital of \$100,000.

Washington, D. C.—Lighting.—American Lighting Co. of Baltimore, Md., has contract for furnishing high candle-power lighting for Washington and District of Columbia.

MISSISSIPPI.

Coldwater—Cotton-oil Mill.—Coldwater Cotton Oil Co. is the name of company reported lately to be organized by F. F. Veazey and others, with capital of \$40,000, for erection of cottonseed-oil mill. F. F. Veazey is president; M. S. Dougherty, vice-president, and A. L. Jague, secretary-treasurer.

Corinth—Cotton-oil Mill.—J. W. Taylor and associates will establish cottonseed-oil mill.

Darling—Lumber Mill.—R. J. Darnell Lumber Co. is erecting mill with capacity of 35,000 feet per day. Company owns 10,000 acres of timber lands in vicinity of Darling.

Meridian—Shops.—Shops of proposed Memphis & Gulf Railroad will be located at Meridian. Address "Board of Trade."

Mt. Olive—Ice Plant.—Mt. Olive Ice Co. has been incorporated with J. B. Parkman, president; J. G. Cherry, vice-president; M. Henry, secretary, and J. B. Rawls, treasurer, for operating the 10-ton ice plant for which contract was recently reported as having been let.

MISSOURI.

Adrian—Lumber Company.—Chartered: Farmers' Lumber Co., with capital of \$10,000, by J. L. Young, W. H. Duke and F. L. Gilpin.

Aurora—Mining.—Good Hope Mining Co. has been incorporated, with capital of \$25,000, by G. A. Ullman, E. J. Grosseup, E. M. Plank and others.

Bloomfield—Lumber Company.—Tiller Lumber Co. has been incorporated, with capital of \$4000, by John H. Tiller, W. F. Tiller, G. B. Buck and others.

Cameron—Water-works.—Hiram Phillips of St. Louis, Mo., will prepare plans and specifications for water-works at Cameron, recently reported; C. M. Young, mayor.

Cape Girardeau—Lumber Company.—Romine Lumber Co. has been incorporated, with capital of \$10,000, by J. W. Fristoe, M. E. Leming and B. F. Givens.

De Soto—Tie and Lumber Company.—Mayo Tie & Lumber Co., with capital of \$30,000, has been incorporated by T. R. Mayo, W. E. Mayo and W. P. Mayo, for conducting lumber and tie business. Address T. R. Mayo, manager.

Kansas City—Land Company.—Bay State Land Co., with capital of \$40,000, has been incorporated by C. J. Hubbard, J. P. Danna and E. H. Dwinell.

Kansas City—Land and Cattle Company.—Tebbo Land & Cattle Co. has been incorporated, with capital of \$300,000, by George M. Casey, B. F. Hargis and Samuel Simpson.

Lexington—Water-works.—Gustav Haerle has purchased water-works of Lexington Water Co. and will improve and extend the system.

Lincoln—Construction.—Chartered: Lincoln Construction Co., with capital of \$30,000, by Timothy McMahon and others.

Maryville—Hardware Company.—Pickens, Diss & Smith Hardware Co. has been incorporated, with capital of \$10,000, by G. A. Pickens, G. A. Diss and W. C. Smith.

New Franklin—Electric-light and Water Plants.—City will construct electric-light and water plants. For information address Business Men's Association; W. W. Carpenter, secretary.

Richmond—Filter Plant.—City contemplates installing filter. Address "The Mayor."

Springfield—Mercantile.—Chartered: Reps Dry Goods Co., with capital of \$25,000, by William Reps and others.

Springfield—Implement and Buggy Company.—Springfield Implement & Buggy Co. has been incorporated, with capital of \$8000, by J. T. Crank, O. T. Hamlin, W. J. Witherpoon and others.

St. Joseph—Construction.—St. Joseph Street Construction Co. has been incorporated, with capital of \$10,000, by John I. McDonald, Rice McDonald and Marvin M. Davis.

St. Louis—Glass and Paint Factory.—All-Round Glass Co., with capital of \$3000, has been chartered for manufacturing paints, glass, etc., by Wm. G. Buchne, Samuel C. Harvey, John T. Stutz and others.

St. Louis—Clothing Company.—Chartered: Weik & Kortanek Clothing & Tailoring Co., with capital of \$5000, by Philip Julius, F. J. Kortanek, John Weik and others.

St. Louis—Bottling Works.—J. F. Lazier Manufacturing Co., with capital of \$15,000, has been incorporated, for manufacturing carbonated water, by Chas. M. Clendennin, Franklin P. Ham and others.

St. Louis—Grain Company.—American Grain Co. has been incorporated, with capital of \$25,000, by E. C. Simmons and others.

St. Louis—Foundry.—Star Foundry Co. has been incorporated, with capital of \$3000, by Aug. L. Niehaus, R. L. Riehl, Geo. A. Krag and others.

St. Louis—Drug Company.—Berlin-American Drug Co. has been chartered, with capital of \$50,000, by J. H. Hallet, M. W. Cattle, M. L. Eldridge and others.

St. Louis—Coal Company.—St. Louis Coal Co. has been incorporated, with capital of \$25,000, by W. E. Sullivan, N. H. Lefavor, C. F. Lefavor and others.

St. Louis—Advertiser Company.—Chartered: St. Louis Automatic Advertiser Co., with capital of \$2100, by D. A. Weiss and others.

St. Louis—Liquor Company.—Rauer Liquor Co. has been incorporated, with capital of \$25,000, by Joseph Rauer and others.

St. Louis—Can Company.—Columbia Can Co. has increased capital from \$28,000 to \$60,000.

St. Louis—Educational.—Chartered: World's Fair Educational Colony Co., with capital of \$50,000, by Edwin D. Lindsay and others.

Washington—Street Cleaning, etc., Company.—Chartered: Washington Sanitary Street Cleaning & Flushing Co., with capital of \$5000, by Gottlieb Eyerman, Jr., Theo. Rasieur, Arthur E. Kammerer and others.

NORTH CAROLINA.

Belhaven—Ice Factory.—R. L. Bonner of Washington, N. C., and others have organized the Belhaven Ice Co., with capital of \$12,000, for establishing 12-ton ice plant.

Charlotte—Cotton Mill.—E. A. Smith, J. P. Wilson and Jeremiah Goff have incorporated Haskins Cotton Mill Co., with authorized capital of \$500,000. It is rumored that 15,000 spindles and 450 looms are contemplated.

Conover—Flour Mill.—S. S. Rowe and R. L. Hunsucker have purchased and will operate flour mill of Farmers' Milling Co.

Gibsonville—Lumber Company.—Oak Lumber Co. has been incorporated, with capital of \$50,000, for manufacture of lumber, by C. L. Stockwell, Gibsonville; W. T. Williams and J. W. Murray, Burlington, N. C.

Goldsboro—Live-stock Company.—Bennett Live-Stock Co. has been incorporated, with capital of \$5000, by W. E. Borden, J. W. Aycock and Don Scott.

High Point—Refrigerator Factory.—George R. Day of Maine will build refrigerator factory at High Point.

High Point—Stone Works.—D. E. Oakes of Logansport, Ind., will complete arrangements at once for establishment of stone works at High Point.

Lakeview—Land Improvement, etc.—Lakeview Townsite Co., reported last October as being organized, and recently under Carthage as incorporated, with capital of \$100,000, to develop Lakeview, new townsite in Moore county, has H. M. Holleman of Boston, Mass., president, and Percy L. Gardner of Lakeview, treasurer. Improvements include construction of dam, erection of hotel, etc., work on which has already been commenced. Address for further particulars P. L. Gardner.

Locust Hill—Flour Mill.—Geo. T. Collie is remodeling flour mill, and will later on install roller mill; contracts have not been awarded.

Plumtree—Bobbin and Shuttle-block Factory.—T. B. Vance will establish factory for manufacturing shuttle blocks and bobbin heads.

Raleigh—Turpentine Refinery.—Ashley Horne, Joseph R. Chamberlain, Carey J. Hunter and James H. Pou have incorporated the Horne Turpentine Refinery Co., with capital of \$16,000, and privilege of increasing to \$100,000, for erection of turpentine refinery at Betts Spring.

Statesville—Woodworking Plant.—J. C. Steele & Son, operating machine shops and foundry, will build two-story brick addition to its plant, to be used as woodworking department.

Wake County—Coal, Iron and Copper Mines.—Seaboard Steel & Iron Co. of Washington, D. C., has been incorporated, with capital stock of \$5,000,000, by Anthony J. Galeski, Eugene Gough, Charles P. Rosenberg and others, and has secured 2500 acres of land in Wake, Johnson and Pender counties, North Carolina, for purpose of prospecting and mining for coal, iron and copper. T.

Darrington Semple of New York is also said to be interested.

Wilmington—Stemmy.—Wilmington Tobacco Warehouse Co. will operate stemmy in connection with its warehouse; capacity 10,000 pounds of tobacco per day.

Wilmington—Building-material Factory.—Wilmington Stone & Construction Co., for manufacture of concrete hollow building blocks, has been organized, with capital of \$20,000, and privilege of increasing to \$100,000, by S. P. Adams and H. E. Bonitz of Wilmington and W. H. Griffin of New Berne, N. C.

Wilmington—Saw-mills, etc.—New Hanover Shingle Mills has been incorporated, with capital of \$60,000 and privilege of increasing to \$100,000, for developing timber lands, establishing saw-mills, etc. C. W. Mitchell of Alexander, president; W. B. Taylor of Winton, secretary-treasurer, and H. A. Brown, Jr., of New Berne, general manager.

SOUTH CAROLINA.

Abbeville—Gold Mine.—D. C. Stainback and associates are organizing company for extensive developments of gold properties.

Aiken—Mercantile.—Belvedere Company has been incorporated, with capital of \$5000, for dealing in poultry, by J. W. Levy and others.

Beaufort—Lumber Mills.—Charleston Lumber Co., which has about completed erection of mill at Brickyard with capacity of 35,000 feet daily capacity, is reported to build another mill of 60,000 feet capacity in vicinity of Brickyard.

Camden—Ice Plant.—Camden Water, Ice & Light Co. has contracted for installation of 15-ton ice plant.

Camden—Casket and Coffin Factory.—Camden Casket and Coffin Factory will increase capacity, as recently reported. New building will be two stories, of brick and glass, 60x170 feet. Capital will be increased from \$15,000 to \$75,000, and \$55,000 will be expended on improvements.

Charleston—Wood Company.—Chartered: Benjamin Wood Co., with capital of \$2000, and G. W. Benjamin, vice-president.

Georgetown—Machine Shops.—C. O. Brightman and S. T. Lipsey have established machine shops, and will operate as the Brightman-Lipsey Machine Co.

Newberry—Knitting Mill.—Newberry Knitting Mill will increase capital stock from \$25,000 to \$40,000 and improve its plant.

Seneca—Timber-land Development.—R. E. Johnson and associates, reported recently under Greenville, S. C., as having organized the Saluda River Lumber Co. with capital of \$250,000, have purchased 40,000 acres of hardwood timber lands and intend building band-saw mill.

Union—Water-power Electric Plant.—Union Manufacturing & Power Co. has let contract to Geo. O. Tenney, Spartanburg, S. C., for construction of dam 25 feet high and 900 feet long, also for power-house. This company was reported in February as to develop about 10,000 horse-power for transmission to operate cotton mills, etc. Thomas C. Duncan is president, as well as president of Union Cotton Mills and of Buffalo Cotton Mills, and it is understood that additional mills are contemplated. The two mills named have an aggregate capital of \$1,700,000.

TENNESSEE.

Brownsville—Flour Mill.—Robertson & Crandall will remodel flour mill and enlarge capacity.

Chattanooga—Medicine Factory.—Thatcher Medicine Co., reported last week as having increased capital from \$88,000 to \$200,000, will erect additional building for increasing capacity.

Chattanooga—Coal Mines.—Clinton Coal & Coke Co., recently chartered under New York laws, with Julian Rainger, president, has acquired properties in Cumberland and adjoining counties and is preparing to open up several coal mines.

Chattanooga—Lumber Mill.—Case Lumber Co. will erect at once \$25,000 lumber mill with capacity of 30,000 feet per day.

Clouse Hill—Coal Mines, Coke Ovens, etc.—Sewanee Coal, Coke & Land Co. is preparing to enlarge output at its new property near Nunnally Ridge; fifty coke ovens will be erected and 400-ton coal washer installed; will also install modern screens, tipple, etc. Engineering is in charge of Ramsey Engineering Co. of Birmingham, Ala.

Dukedom—Flour Mill.—Dukedom Roller Mill Co. has been incorporated, with capital of \$7000, by J. S. Cavender, J. N. Harris, P. H. Collier and others.

Franklin—Phosphate Mine.—Fletcher L. Clawson of Ashwood, Tenn., has purchased 500 acres of land near Franklin, and will install machinery for mining phosphate.

Granville—Telephone System.—Dr. W. A. Hargis has organized company for constructing telephone system to Bagdad.

Harriman—Flour Mill.—Emory Milling Co. will remodel flour mill.

Jellico—Sewerage and Water-works.—System of water-works and sewerage for city is being discussed. Address "The Mayor."

Johnson City—Street Improvements and Schools.—City will vote May 26 on issue of \$25,000 of bonds for streets and schools. Address "The Mayor."

Kenton—Electric-light Plant.—City will issue \$12,500 of bonds for electric-light plant. Address "The Mayor."

Knoxville—Zinc Mines.—Cleveland (Ohio) parties, including Dudley Baldwin, have purchased 2000 acres of lands in Knox county, and will build zinc plant.

Knoxville—Marble Company.—Empire Marble Co. has been incorporated, with capital of \$50,000, by John J. Craig, J. B. Jones, J. R. Stone and others.

Lebanon—Laundry.—Chartered: Lebanon Steam Laundry, with capital of \$5000, by D. E. Mitchell, A. M. McClain, E. E. Weis and others.

Memphis—Candy Factory.—Andrews Company of Charlotte, N. C., will remove candy factory to Memphis.

Memphis—Electric-light Plant and Ice Factory.—Electric-light plant and ice factory will be installed at City Hospital at cost of \$5000.

Morristown—Telephone System.—Judson Hill and associates are organizing independent telephone company for constructing system from Morristown to Greenville, Bristol and Knoxville.

Nashville—Milling.—Tri-State Milling Co. has been incorporated, with capital of \$30,000, by A. P. Youngblood, Bruce P. Shepard, John Coope and others.

Nashville—Land Improvement.—Nashville Land Improvement Co. has amended charter, changing name to Nashville Realty Co. and increasing capital stock from \$1,000,000 to \$3,000,000.

Nashville—Cotton Gin.—Chartered: Moffatt Gin Co., with capital of \$5000, by J. R. Moffatt, J. A. Evans, T. B. Hill and others.

Pless—Haulage Plant.—Minersville Coal Co. contemplates putting in haulage plant at once.

Ripley—Cannery.—Halls Canning Co. has been incorporated, with capital of \$1000, by H. W. Myers, W. F. Wilson, B. M. Archer and others.

Smyrna—Flour Mill.—R. O. Davis contemplates building 75-barrel flour mill.

TEXAS.

Beaumont—Casket Factory.—William Edward Cox of Grand Rapids, Mich., is investigating with a view to establishing casket factory at Beaumont.

Belton—Electric-light Plant.—C. W. Meyer, T. Fairweather and C. F. Denny have purchased and will operate Belton electric-light plant.

Brownsville—Rice Mill.—William M. Ratcliff, John T. Daily and Frank E. Daily have incorporated the Merchants & Planters' Rice Milling Co., with capital of \$125,000, to operate rice mills, warehouses, etc.

Brownwood—Bridge.—M. S. Hasle Company of Dallas has contract at \$3573 for constructing steel bridge across Pecan creek.

Caldwell—Lumber Mill.—M. L. Womack, C. J. Daniel of Caldwell and M. L. Womack, Jr., of Houston have organized the Womack-Daniel Lumber Co. for dealing in and manufacturing lumber.

Center—Oil Mill.—Shelby County Cotton Oil Co. has been chartered, with capital of \$30,000, for establishing cottonseed-oil mill. H. N. Runnels is president; R. J. D. Ellington, vice-president, and J. W. Saunders, secretary-treasurer.

De Leon—Cannery.—De Leon Canning Co., recently reported incorporated for establishing cannery, will have capacity of 20,000 three-pound cans.

Edna—Oil Well.—W. D. Timberlake of Augusta, Ga., has let contract to John W. Young for boring oil well near Edna.

Fort Worth—Publishing.—J. W. Spencer, Clarence Ousley, C. W. Hutchison, F. P. Holland and others will organize stock company to purchase and publish the Morning Register.

Fort Worth—Match Factory.—Board of Trade is negotiating with parties relative to establishing match factory.

Galveston—Terminals.—Chicago, Rock Island & Pacific Railway, C. A. Goodnow, general manager, Chicago, Ill., has purchased water-front property at Galveston, and will improve for docks, wharves, terminals, etc.

Houston—Investment Company.—Chartered: Lockwood Investment Co., with capital of \$20,000, for erecting and repairing buildings, etc., by Henry F. Ring, E. L. Dennis and W. L. Dennis.

Leesville—Oil Wells.—Leesville Oil Co. has been incorporated for developing 2000 acres of oil lands. V. C. Littlefield is president; S. A. Hubbard, vice-president, and Joe Scott, secretary.

Marble Falls—Cotton Mill.—Marble Falls Water & Power Co. will establish cotton factory.

Moulton—Sandstone Company.—Chartered: Moulton Sandstone Co., with capital of \$15,000, by F. T. Fehrenkamp, John Mang and J. R. Crane.

Outline—Oil Wells.—Otto Pioneer Oil Co. has been incorporated, with capital of \$10,000, and J. A. Otto, president; A. Schnabel, vice-president, and J. H. Muenster, secretary-treasurer.

Taylor—Cotton Mill.—Board of Trade is endeavoring to organize a \$100,000 cotton-mill company.

Victoria—Irrigation Company.—J. C. McDowell, F. B. Lander, J. O. West, William Benton and others have acquired controlling interest in Victoria Rice & Irrigation Co.; 25,000 acres of additional lands have been acquired and will be converted into rice farms.

Weatherford—Natorium.—Chartered: Weatherford Natorium Co., by Austin King, Jerre Sully, J. G. Ballard and others.

VIRGINIA.

Berkley—Cement Works.—American Cement Co., 22 Fifteenth street, Philadelphia, Pa., reported several months ago as contemplating the establishment of cement works at Norfolk, has secured site at Berkley and will shortly begin erection of extensive plant.

Churchville—Mineral and Oil Lands.—Dr. Geo. H. Eyster of Baltimore, Md., and associates are reported as having leased 40,000 acres of oil and mineral lands in Augusta county and to develop same.

Covington—Telephone System.—E. M. Nettleton is president; C. W. Rush, vice-president, and R. L. McKinney, secretary-treasurer of the company reported recently as being organized for construction of telephone system.

Danville—Reservoir.—Riverside Cotton Mill Co. has awarded contract for 1,000,000-gallon reservoir to supply new mills now in course of construction.

Fort Monroe—Sewer.—W. G. Morris, Phoenix, Va., has contract at \$3743 for sewer extension at Fort Monroe.

Fredericksburg—Tannery.—John G. Hunkamp Company will repair its tannery and extract works damaged by fire to extent of \$20,000.

Leesburg—Ice Plant.—R. A. Thompson, Dr. J. M. Fox, Joseph L. Norris and others have organized Leesburg Ice & Refrigerating Co. and purchased machinery for ice plant.

Lynchburg—Manganese Mines.—D. W. Myers has purchased manganese mines of Lerner Mining & Manufacturing Co., and may continue operation of same.

Martinsville—Electric-light Plant.—City will grant franchise for installation of electric-light plant. Address A. S. Gravelly, clerk of council.

Newport News—Medicine Factory.—Barney Medicine Co. will be chartered, with capital of \$20,000 and H. P. Barney, president, for manufacture of patent medicine.

Norfolk—Furniture Factory.—Hugh C. Risdon, P. O. Box 601, will build \$20,000 furniture factory for Emporia (Va.) parties; electricity will be motive power.

Richmond—Printing Plant.—Robert Mitchell and E. D. Hotchkiss, Jr., have purchased and will operate I. N. Jones' printing plant.

Richmond—Cold-storage Warehouse.—R. Kastelberg & Sons will erect cold-storage warehouse.

Roanoke—Water power.—Baltimore (Md.) and Richmond (Va.) parties have, it is reported, purchased controlling interest in Roanoke Water-Power Co. and will begin developments at once, constructing dam, etc.

WEST VIRGINIA.

Anthony—Lumber Company.—Henderson Lumber Co. has been incorporated, with capital of \$100,000, by J. D. Henderson, John W. Henderson, Anthony; Thomas W. Bond, Orange, Va.; J. E. Caggs, Charleston, W. Va., and others.

Barbour County—Coal Mines.—Morgart Coal & Coke Co., reported recently under Cumberland, Md., as incorporated with capital of \$125,000, has acquired and will develop coal lands in Barbour county, West Virginia. Contracts for proposed machinery and im-

provements have not as yet been made. Address William A. Morgart, Cumberland, Md.

Chapmanville—Coal Mines.—Home Branch Coal Co. has been incorporated, with capital of \$36,000, by W. A. Lindsay, Kimball, W. Va.; Forrest Summers, R. B. Williamson, Joel T. Adorus, War Eagle, W. Va., and others.

Charleston—Liquor Company.—Charleston Liquor Co. has been incorporated, with capital of \$50,000, by O. M. Haines and others.

Eagle—Coal Mines, Coke Ovens, etc.—Gordon Coal & Coke Co., reported lately as incorporated, has for its purpose operating and developing coal mines, manufacturing coke, etc.; output of coal at present is from 1500 to 1800 tons a day, and output of coke ovens 200 tons a day. No contracts for proposed improvements have been awarded, and communications may be addressed C. D. Caldwell, manager. Jesse Stearns of New York is president; B. L. Dulaney of Bristol, Tenn., vice-president, and E. R. Chapman, New York, treasurer.

Elkins—Lumber Mill.—R. Chaffey and R. M. McMillin have purchased and will operate lumber mills of W. C. Russell Lumber Co. at South Elkins.

Grafton—Coal Lands.—W. H. Easter of Pittsburgh, Pa., has purchased leases on several hundred acres of coal lands in West Virginia from Mrs. J. D. Tennymer of Grafton and others.

Green Spring—White-sand Works.—Baltimore (Md.) parties, including Thomas T. Boswell, president Merchants' Coal Co., have purchased plant of Potomac White Sand Co.

Kanawha County—Coal Mines.—Blue Creek Coal & Coke Co., recently incorporated, with capital stock of \$2,000,000, owns 47,000 acres of coal and timber lands in Kanawha county which it will develop. Edward S. Jones of Seranton, Pa., is president, and W. A. MacCorkle of Charleston, W. Va., vice-president. C. P. Peyton, care of Chilton, MacCorkle & Chilton, Charleston, is engineer in charge.

Marlinton—Tannery, etc.—J. G. Hoffman & Sons Co. of Wheeling, W. Va., recently reported as having purchased timber and coal lands in Pocahontas and Greenbrier counties, West Virginia, and Highland county, Virginia, and to inaugurate extensive developments which would include erection of saw-mills and tannery probably near Marlinton, have incorporated the Pocahontas Tanning Co. to establish and build the tannery, but have made no arrangements as yet for architect or machinery.

Moundsville—Steel-car Plant.—Arrangements are being made for establishment of pressed-steel-car plant; company with capital stock of \$3,000,000 will be organized and plant established with capacity of ten finished cars per day. Harry Smith of Wheeling, W. Va., and a member of the Moundsville Mining & Manufacturing Co., is interested.

Paden Valley—Electric Plant, Water-works, etc.—Paden Valley Co. has been incorporated for construction of water-works, electric-light and power plant, with capital of \$200,000, by Charles L. Woodbridge, Robert Miller, Geo. R. Wallace of Pittsburgh, Pa.; John P. Gangwisch, Grafton, Pa., and others.

Parkersburg—Oil and Gas Company.—Kentucky Oil & Gas Co. has been incorporated, with capital of \$1,000,000, by T. F. J. Kistler, P. A. Vogel, Geo. A. Shouting, Columbus, Ohio; E. Sears, O. A. Sears, Parkersburg, and others.

Wheeling—Reservoir.—Construction of new storage reservoir is proposed. Address President Butts of the water board.

Wheeling—Tannery.—John G. Hoffman, Frank C. Hoffman, James Nelson Vance and others have incorporated the Pocahontas Tanning Co., with capital stock of \$1,000,000, for establishing tannery.

Wheeling—Axe Factory.—Spears Axe Co. will erect large addition to its plant.

Wheeling—Casket-handle Factory.—Charles Sanford has organized company for manufacture of casket or coffin handles; will also manufacture a patent electric-light globe.

OKLAHOMA TERRITORY.

Fletcher—Development.—Chartered: Fletcher Land & Development Co., with capital of \$7500, by Henry Frey, J. B. Morris and G. A. Jones.

Marshall—Telephone System.—Marshall Telephone Co. has been incorporated, with capital of \$1200, by Oscar Leafquist, B. W. Murphy, W. L. Helter and others.

Mountain Park—Mill and Elevator.—Mountain Park Mill & Elevator Co. has been incorporated, with capital of \$15,000, by Mark Roberts, W. P. Bryan, W. J. Stubblefield and others.

Oklahoma—Grain and Elevator Company.—

Smith Grain & Elevator Co. has been incorporated, with capital of \$15,000, by C. D. Smith, G. N. Teague and R. W. Johnson.

Shawnee—Mercantile.—Chartered: Kerfoot-Bell Wholesale Grocery Co., with capital of \$50,000, by C. W. Kerfoot, D. N. and C. A. Bell.

Wichita Junction (not a postoffice).—Telephone Company.—Consolidated Telephone Co. has been incorporated, with capital stock of \$500,000, by E. E. Blake, Otto A. Shute and E. J. Simpson, all of El Reno, O. T.

BUILDING NOTES.

*Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery, Proposals and Supplies Wanted."

Aberdeen, Miss.—Aberdeen Lodge, No. 620, B. P. O. E., has let contract for erection of its proposed new home building.

Anderson, S. C.—Church.—Plans of W. A. Edwards of Columbia, S. C., have been accepted for proposed \$10,000 church of Grace Episcopal congregation.

Atlanta, Ga.—Hospital.—C. H. Pitman has contract at \$8000 for building maternity ward for Grady Hospital. W. T. Downing prepared the plans.

Atlanta, Ga.—Engine-house.—City will build \$10,000 engine-house. Address "The Mayor."

Atlanta, Ga.—Hospital.—Mrs. John N. McEachern, 174 Ogilthorpe avenue, and the Woman's Home Mission Society will build hospital.

Austin, Texas—Dormitory.—Board of control of Simmons College has awarded contract for erection of \$7500 dormitory.

Baltimore, Md.—Hospital.—Building Inspector Preston is preparing plans for two-story brick and stone hospital 28x150 feet at Bayview Asylum.

Baltimore, Md.—Warehouse.—J. Henry Miller has contract for erecting \$40,000 warehouse previously reported for A. Gottschalk & Co.

Baltimore, Md.—Apartment-house.—D. W. & G. H. Thomas have been awarded contract for erecting the Maryland Apartment House, corner St. Paul and Preston streets; building will be eight stories, of stone, brick and terra-cotta, 45x122 feet. Edward H. Glidden prepared the plans.

Baltimore, Md.—Warehouse.—Henry S. Rippel has contract for building proposed warehouse for Lucas Bros., 116 East Baltimore street; cost \$15,000.

Baltimore, Md.—Store Building and Residence.—Joseph Schamberger has contract for erecting store building and residence for William Schoenhals; will be three stories, of brick, 20x100 feet.

Baltimore, Md.—Office Building.—Maryland Casualty Co., John T. Stone, president, has purchased site at \$275,000 and will erect office building.

Baltimore, Md.—Laboratory.—Chas. E. Blaney has contract for improvements at Laboratory of Emerson Drug Co.

Baltimore, Md.—Warehouse.—John T. Buckley has contract for erecting proposed building for Esselman & Co.; cost \$20,000.

Beaumont, Texas—Depots.—Texas & New Orleans Railroad, E. B. Cushing, engineer, Houston, Texas, will build freight depot, 65x350 feet, and passenger station at Beaumont; cost \$30,000. Plans not yet completed.

Birmingham, Ala.—Improvements.—W. M. Drennen and associates have purchased Blount Springs and adjoining property, and will improve same by erection of brick and stone hotel to have all improvements, including electric-light plant, steam heat, etc. About \$100,000 will be expended.

Birmingham, Ala.—School.—Talliaferro & Alfred have contract for erecting \$12,000 school building.

Birmingham, Ala.—Office Building.—Southern Railway, C. H. Ackert, general manager, Washington, D. C., will erect office building at Birmingham.

Birmingham, Ala.—School.—Plans will be drawn at once for proposed new high-school building. Address Mayor W. M. Drennen.

Bowie, Md.—Parsonage.—Weibel Bros. of Upper Marlboro, Md., have contract for building parsonage of Protestant Episcopal Church of the Ascension at Bowie.

Caldwell, Texas—School.—W. B. Shilman has contract at \$150 for erecting new school building.

Cleburne, Texas—Roundhouse, etc.—Atchison, Topeka & Santa Fe Railroad will double capacity of roundhouse and make other improvements at Cleburne. H. U. Mudge, general manager, Topeka, Kan.

Columbia, S. C.—Temple.—Frank P. Milburn will prepare plans and specifications for remodeling present Masonic Temple; cost \$12,000. Address J. W. Bauer, chairman.

Columbia, S. C.—Freight Depot.—J. D. Elliott of Hickory, N. C., has contract at \$11,000 for erecting Seaboard Air Line freight depot at Columbia.*

Concord, N. C.—Business Building.—Brown, Taylor & Doughty will erect two-story brick business building 56x66 feet.

Crowley, La.—Hotel.—Crowley Hotel Co., Limited, recently reported incorporated, will erect four-story hotel, 150x70 feet, to cost about \$70,000. Address Frank Randolph, secretary.

Cumberland, Md.—Parsonage and School.—F. Mertens' Sons have contract for erecting parsonage and school building of St. Mary's Catholic Church, previously reported; school will be two stories, of brick, stone and terra-cotta, 87x49 feet.

Durant, I. T.—School.—City has issued \$15,000 of bonds for erection of school building previously reported. Architect has not been engaged nor contracts awarded. Address W. T. Whitlatch, president school board.

Eufaula, Ala.—Church.—St. James' Church will erect new edifice. Address "The Pastor."

Fayetteville, N. C.—Sanitarium.—Dr. Geo. Hughes of Pennsylvania has purchased property near Fayetteville from John P. Thomas and will erect large sanitarium and make other improvements.

Fernandina, Fla.—Hotel.—Fernandina Hotel Co. is being organized, with capital of \$25,000, for erection of 35-room stone hotel, plans for which have been completed. Address company care of Judge Baker.

Fitzgerald, Ga.—Warehouse.—Phoenix Grocery Co. will increase capital from \$15,000 to \$25,000, and has let contract to B. Dickerson for erecting brick and iron addition, 40x170 feet, to warehouse.

Fort Worth, Texas—Factory Building.—W. J. Boaz is erecting three-story brick building to be occupied by Texas Anchor Fence Co.

Fort Worth, Texas—Bank Building.—Fort Worth National Bank is erecting seven-story brick fireproof bank and office building.

Fort Worth, Texas—Building.—Geo. F. Reynolds will erect five-story brick building.

Greensboro, N. C.—Business Building.—J. N. Longest has contract for erecting three-story brick building to be occupied by the Scott-Sparger Company.

Greenville, N. C.—Masonic Temple.—Richard Williams, chairman Masonic building committee, will open bids May 21 for erection of three-story Masonic building to cost \$10,000. Plans and specifications can be seen at office of Richard Williams or Hook & Sawyer in Charlotte, N. C. Each bid must be accompanied by certified check for \$200. Usual bond and rights reserved.

Houston, Texas—Hall.—Monta Beach will erect hall building 75x125 feet.

Huntsville, Ala.—Business Building.—John Anderson & Co. will erect three-story business building 50x120 feet.

Huntsville, Ala.—Theater.—Charles E. Hutchens has contract for erecting proposed summer theater.

Jackson, Miss.—Store Building.—Jones-Kennington Dry Goods Co. will build seven-story department store to cost \$100,000.

Jacksonville, Fla.—Hospital.—State board of health has awarded contract to B. E. Bolling for erection of new isolation hospital.

Lexington, Ky.—Schools.—R. P. Shryock, chairman board of education, will open bids May 6 for erection of two school buildings according to plans and specifications on file with H. L. Rowe, architect. Proposals will be received for buildings complete and for different departments separately; contractors figuring on buildings complete must omit heating, plumbing, gasfitting and electric-light work.

Lincolnton, N. C.—Business Block.—L. W. Cooper of Charlotte, N. C., has contract for \$10,000 business block at Lincolnton for J. A. Abernathy.

Little Rock, Ark.—Office and Store Building.—Chas. F. Penzel will erect six-story brick store and office building.

Louisville, Ga.—Courthouse and Jail.—County board of roads and revenues contemplates issuance of \$20,000 of bonds for building courthouse and jail.

Louisville, Ky.—Bank Building.—J. J. Gaffney has made plans for remodeling First National Bank Building.

Louisville, Ky.—Hotel.—Company is being organized for erection of nine-story hotel to cost \$80,000, for which the Wells Construction Co. of New York is said to have contract. Peter Arlund is interested.

Manatee, Fla.—Store Building.—K. W. Wiggins has let contract to Mr. Blackburn for erection of two-story brick store building, 30x75 feet, to have electric lights, elevators, etc.

Meridian, Miss.—College.—East Mississippi Female College, recently burned, will be rebuilt at cost of between \$75,000 and \$100,000. Address President Beeson.

Monticello, Miss.—Jail.—W. H. Speights, clerk, will open bids June 1 for building county jail according to plans and specifications on file in office of chancery clerk, and F. B. and W. S. Hull, Jackson, Miss. Certified check for 20 per cent. of amount of bid must accompany each proposal. Usual rights reserved.

Mount Savage, Md.—Church.—St. George's Protestant Episcopal congregation will erect \$10,000 church. Address "The Pastor."

Oklahoma City, O. T.—Union Depot.—W. S. McCaull and others of Kansas City, Mo., have movement on foot for erection of \$500,000 union depot at Oklahoma.

Oklahoma City, O. T.—Roundhouse and Depots.—Missouri, Kansas & Texas Railway will build 10-stall roundhouse and two depots at Oklahoma City to cost \$75,000; A. A. Allen, general manager, St. Louis, Mo.

Orange, Texas.—School.—H. Koerner of Beaumont has contract at \$15,000 for erecting proposed high school at Orange.

Pensacola, Fla.—Hotel.—William Briggs of Chicago, Ill., has purchased property at Pensacola and will build hotel.

Raleigh, N. C.—Library.—J. N. & W. H. Williamson, proprietors Pilot Cotton Mills, have had plans made for erection of library building and hall for use of employees.

Ronoke, Va.—Roundhouse.—Norfolk & Western Railroad Co. has prepared plans and specifications for addition to roundhouse to cost \$150,000. L. E. Johnson, general manager.

Sealy, Texas.—School.—City will issue \$10,000 of bonds for erecting school building. Address "The Mayor."

Southern Pines, N. C.—Hotel.—Charles St. John and associates will build 200-room hotel, as recently reported, to cost \$35,000. W. T. Broxton, building superintendent, in charge.

St. Matthews, S. C.—Store.—George W. Archer will erect two-story brick store building.

St. Matthews, S. C.—Bank Building.—St. Matthews Savings Bank will erect new building.

St. Louis, Mo.—Building.—Contract for erection of Missouri's building at the World's Fair has been awarded to Strehlow & Phelps for \$105,480. Isaac S. Taylor prepared the plans.

Texarkana, Ark.—Jail.—Bryant & Brown have contract for erecting county jail; cost \$40,000.

Wadesboro, N. C.—Dormitory.—Pee Dee Institute has awarded contract to W. T. Brasington for erection of dormitory previously reported.

Washington, D. C.—Apartment-house.—Jas. L. Karrick is having plans made by Charles Gregg for erection of apartment-house.

Washington, D. C.—Hotel.—It is reported that Willard Hotel Co. contemplates erecting another \$500,000 hotel.

Washington, D. C.—Hotel.—P. Thornton Marry and Fred A. Wright have prepared the plans and contract has been awarded the National Realty & Construction Co. of Philadelphia, Pa., for erection of the hotel previously reported to be built by Potomac Hotel Co., organized with capital stock of \$1,000,000. Building will be equipped with modern improvements, including electric lights, steam heat, elevators, complete refrigerating and ice-making plant, etc.

Wheeling, W. Va.—Depot.—Depot reported recently to be built by Baltimore & Ohio Railroad will be two stories, of brick, with stone trimmings, and cost \$50,000. Address Geo. L. Potter, general manager, Baltimore, Maryland.

Wheeling, W. Va.—Office Building.—Wheeling Mold & Foundry Co. will erect brick office building to replace one recently burned.

RAILROAD CONSTRUCTION.

Railways.

Ardmore, I. T.—Tracklaying reported begun on the 'Frisco branch from Scullin to Sulphur.

Austin, Texas.—The Trinity & Brazos Valley Railroad, now actively building between Cleburne and Mexia, Texas, eighty miles, will, it is reported, be finished between those points by July 15. R. H. Baker, general manager, is reported as saying that it will be

continued southeast from Mexia to Trinity or Huntsville.

Baltimore, Md.—Powell & Mason of Baltimore are reported to have the contract for building the Morella & Tacambaro Railway in Mexico, which is to run from Irapuato, on the Mexican Central, to Morella and thence to Arlo, about 150 miles.

Baltimore, Md.—The Maryland & Pennsylvania Railroad is reported surveying for a spur from Bel Air, Md., to the Susquehanna river. J. S. Norris is general manager at Baltimore.

Baltimore, Md.—The Hardman's Branch Railroad Co. of Kingwood, W. Va., is chartered to build from Hardman's Switch, on the Baltimore & Ohio, in Preston county, West Virginia, to Halleck, in Monongalia county, West Virginia. The incorporators are Hugh McNeill, Jr., Frederick Foster, Irvine R. Dickey, Guy F. Smith, all of Baltimore, Md., and John J. Baumgartner of Westminster, Md. This is reported to be a Baltimore & Ohio project. J. M. Graham, chief engineer, at Baltimore.

Baltimore, Md.—It is reported that the Baltimore & Ohio Railroad will elevate its tracks at Wheeling, W. Va. J. M. Graham is chief engineer at Baltimore.

Beaumont, Texas.—Reported that the Meeker Investment Co. of Columbus, Ohio, represented by J. W. Meeker, will build the electric railway from Beaumont to Sour Lake, in which Ed. Kennedy and others are interested.

Beaumont, Texas.—The Dallas & Beaumont extension of the Texas & New Orleans Railway has been completed.

Charleston, W. Va.—The Kanawha Valley Traction Co. of Charleston and the Elkins Syndicate, in which Senator S. B. Elkins of Elkins and others are interested, are, it is reported, making surveys for lines along the river.

Charleston, W. Va.—The Imboden & Odell Railroad Co. has been organized to build forty-three miles of railroad on lands of the Blue Creek Coal & Land Co., of which ex-Governor W. A. MacCorkle of Charleston is vice-president, and Edward S. Jones of Scranton, Pa., is president. The Manufacturers' Record is officially informed that the railroad will connect the Elk river and the Gauley river, and also the Elk river and the Kanawha river. It will be pushed to an early completion, rights of way and surveys having been settled. C. P. Peyton is engineer.

Chicago, Ill.—McArthur Bros. of Chicago are reported to have secured the contract for building eleven miles of a cutoff for the Yazoo & Mississippi Valley Railroad (Illinois Central system) near Memphis, Tenn.

Chicago, Ill.—It is reported that the Illinois Central will extend the Canton, Aberdeen & Nashville Railroad from Brilliant, Ala., north to Sheffield, and thence to the northwestern corner of Alabama, a total distance of about ninety miles. David Sloan is chief engineer of construction Illinois Central at Chicago.

Chicago, Ill.—The Illinois Central Railroad will, it is reported, build a six-mile extension between Roundaway, Miss., and the State Farm, the ultimate plan being to extend twenty miles from the State Farm to Dockery. David Sloan is chief engineer of construction at Chicago.

Columbia, Ky.—The Columbia Interurban Railway Co. has been organized to build a line from Columbia to Campbellsville, nineteen miles. The officers are W. K. Azbill, president; W. W. Bradshaw, vice-president; C. S. Harris, secretary, and Judge W. W. Jones, treasurer. The directors include the officers and N. M. Tutt, W. R. Myers and J. O. Russell. Others incorporators are Jas. T. Page, J. N. Conover, James Garnett, Jr., W. F. Jeffries, Z. T. Williams, G. W. Robinson, A. S. Chewning, T. A. Murrell, T. R. Stults, George Nell, J. N. Coffee, J. D. Lowe, W. B. Rowe, W. D. Jones and L. V. Hall.

Dallas, Texas.—Concerning the reduction of grade on Coldwater or Millwood Hill, Mr. B. S. Wathen, chief engineer of the Texas & Pacific Railway, writes the Manufacturers' Record that the work requires revision for a distance of four miles, part of which will be done by teams and part by steam shovel. The hill now has a grade of eighty-five feet per mile in part. The change will be to 1 per cent. The work includes the removal of 120,000 cubic yards of earth.

Demopolis, Ala.—A movement is under way to build a railroad from Demopolis to Linden, about twenty miles.

Donaldsonville, La.—Construction of the Donaldsonville & Napoleonville Railway has begun on "Belecose." Mr. Carroll Barton's plantation. The line will be fifteen miles long. Dr. W. M. McGalliard is president, and Mather D. Bringer, C. E., is vice-president and general manager.

Easton, Md.—The Eastern Shore Improvement Co. is reported considering a plan to build an electric railway connecting Cambridge Ferry, Easton and Love Point, a total distance of about forty miles, the line running via Barber, Trappe, Hambleton, Llandaff, Easton, Longwoods and Skipton, and connecting with the Queen Anne's Railroad at Wye Mills.

England, Ark.—J. E. Hicks, secretary of the Keo Shingle Co., writes the Manufacturers' Record that the England & Clear Lake Railroad will be standard gauge and nine miles long, running west from England to the Arkansas river via Clear Lake and the Keo Shingle Mill to Lasiter Landing. J. D. Beakley is chief engineer.

Farmerville, La.—Ground has been broken for building the Farmerville & Southern Railroad, a Missouri Pacific extension.

Franklin, La.—A franchise for an electric railway along the west bank of Bayou Teche and on the public road from Jeanerette to Berwick has been sold at auction to Gen. F. F. Myles.

Graham, Texas.—Rock Island engineers are reported to have completed the survey from Graham to Throckmorton, and are continuing the line to Haskell.

Hattiesburg, Miss.—Reported that the Pearl & Leaf River Railroad Co. will extend its line from Prentiss, Miss., to Silver Creek, Miss., about forty miles. W. A. Stevenson is chief engineer and traffic manager at Hattiesburg.

Hobart, Okla.—E. E. Colby, engineer for the Colorado & Oklahoma Railway, is reported as saying that work will begin immediately.

Houston, Texas.—The Texas & New Orleans Railway Co. has filed an amendment to its charter providing for a branch from Sour Lake Station to Saratoga, about twenty miles. E. B. Cushing is engineer maintenance of way at Houston.

Knoxville, Tenn.—W. C. Crozier is reported to have made a survey for a line of railroad from a point near Wallands into the mountains.

Knoxville, Tenn.—The Middlesboro Mineral Railway Co. is reported to have purchased forty acres of land at Middlesboro, Ky., for terminals. Henry Fonde of Knoxville, Tenn., is vice-president. He is also general agent of the Southern Railway. The line is to be from thirty to fifty miles long.

Liberty, Miss.—Thompson & Powell of Baton Rouge are reported to have the contract for grading on the Liberty-White Railroad.

Longview, Texas.—It is reported that the Texas, Sabine Valley & Northwestern Railway will build an extension from Timpson to San Augustine, via Center, about thirty miles. G. M. D. Grigsby is president at Longview.

Louisville, Ky.—The Kentucky Traction Co. has, it is reported, bought a right of way on the 18th street pike for an electric road to Riverview, and will, it is stated, build another connecting line. The officers are John F. Kellner, president; H. S. McNutt, vice-president; Charles P. Dehler, secretary, and W. L. Weller, Jr., general manager.

Louisville, Ky.—Hipple & Heller, civil engineers, of Louisville, are reported employed by Cincinnati capitalists to survey for a railroad from Horse Cave, Ky., to Edmonton, Ky., about twenty miles.

Louisville, Ky.—The Louisville Suburban Railway Co. is reported to have let contracts to the A. L. Rich Co., bankers, of Cincinnati, Ohio, for building its line from Louisville to Mt. Washington, about eighteen miles. The Tennis Construction Co. of Cincinnati, which built the Pewee Valley line, will supervise the work. Among those in the company are A. L. Rich, Charles E. Doherty, Samuel Castleman, John C. Russell, Charles E. Claggett, Clint C. McClarty, John J. McHenry, Peyton N. Clarke and C. C. Tennis.

Macon, Ga.—The Central of Georgia Railway has begun work on its terminal improvements.

Mexico, Mex.—The extension of the Mexican Central from San Pedro northward to the Rio Grande is reported completed for fifty miles and graded as far as Paredon, about 200 miles.

Mobile, Ala.—The Gulf & Chicago Railroad is reported to have been granted a charter in Tennessee to build from Jackson to Middleton, about forty miles. This road is under the control of the Mobile, Jackson & Kansas City, of which H. S. Jones is chief engineer at Mobile.

Morehead, Ky.—Work has been resumed on the Morehead & West Liberty Railroad, which is to be twenty-five miles long, to open coal and timber lands. It is expected to be completed in a year.

Naco, Ariz.—It is reported that the Ca-

na, Yaqui River & Pacific Railroad has been authorized to build three branches in Mexico to Naco, Sahuripa, and also to a point on the Sonora Railway. E. A. McFarland is chief engineer at Naco.

Nashville, Tenn.—The Nashville, Chattanooga & St. Louis Railway is reported to have completed its extension from Bon Air to Ravenscroft, Tenn., ten miles.

Panther Creek, Yadkin County, North Carolina.—A movement is under way to build an electric railway from Winston-Salem to Yadkinville, about twenty-five miles. Among those reported as being interested are J. Q. Holton, J. M. Phillips, M. W. Mackie, H. H. Mackie, W. A. Hall, T. R. Harding, H. B. James and M. A. Royall. F. A. Yates at Panther Creek may be addressed.

Parkersburg, W. Va.—The Buckhannon & Northern Railroad, which is to be a Wabash line, is to be extended from the Green County Railroad at a point on the line separating Pennsylvania and West Virginia, south through Fairmont, Grafton and Philippi to Belington, W. Va. Survey is under way. S. D. Brady is chief engineer at Parkersburg.

Parkersburg, W. Va.—The Williamstown & Moundsville Electric Railroad Co. has been granted a franchise to build its tracks on the highways in Wood county.

Pineblow, Ga.—Mr. B. B. Gray, president of the Ocala, Pineblow & Valdosta Railway, writes the Manufacturers' Record as follows: "We expect to extend our line to Nashville, Ga., in Berrien county, a distance of six miles, and expect to have trains running from Pineblow to Nashville by September 1." Mr. Gray is engineer.

Pittsburg, Pa.—The Pittsburg Construction & Engineering Co., 27th street and Liberty avenue, is reported to be consulting engineers for the Wetzel & Tyler Electric Railway Co., which will be built in Wetzel and Tyler counties, West Virginia.

Portsmouth, Va.—The Seaboard Air Line will, it is reported, lower its tracks at Jacksonville, Fla., preparatory to constructing the Bridge-street viaduct. W. W. Gwathmey, Jr., is chief engineer at Portsmouth.

Scottsboro, Ala.—West Virginia capitalists will, it is reported, build the Gurley & Palat Rock Valley Railway from Gurley to Winchester, Tenn.

Scranton, Miss.—W. M. Canty, F. H. Lewis, B. F. Duke, A. G. Delmas and B. D. Valverde have been appointed by the Commercial Club to raise \$500 for a survey and to secure right of way north for a railroad.

South McAlester, I. T.—It is reported that a railroad will be built from South McAlester via Clarksville to Jefferson.

Sparta, Tenn.—Capitalists are reported investigating for constructing an electric railway between Sparta and Cookeville.

Sparta, Ga.—The East & West Railroad of Georgia has been chartered to build a line about thirty miles long from Sparta to Sandersville; capital \$50,000. The incorporators are S. Reese, R. B. Baxter, E. A. Rosier, Julius Mander of Hancock county and W. B. Bennett, Chas. V. Smith, John J. Lovett, Henry M. Carter, Wm. H. Smith and Izzi Pashinski of Washington county.

St. Louis, Mo.—The Missouri Pacific Railway will, it is reported, build a large new freight yard at Memphis, Tenn. H. Rohrer is chief engineer at St. Louis.

St. Louis, Mo.—The St. Louis & San Francisco Railroad is reported to be surveying between Hoxie and Little Rock, Ark. J. F. Hincley is chief engineer of construction, 800 Fullerton Building, St. Louis.

Tyler, Texas.—Concerning the report that the St. Louis Southwestern Railway will build an extension from Gatesville to Hamilton, thirty-two miles, an official informs the Manufacturers' Record that a survey was made there several years ago. The report that the line will be built is not yet confirmed.

Valdosta, Ga.—Mr. H. O. Clement of the Minnesota Lumber Co. writes the Manufacturers' Record as follows: "The name of the railroad we are to build from River Junction, Fla., to Apalachicola, Fla., is the Apalachicola Northern Railroad. The officers are: President, C. B. Duffy, Worcester, Mass.; first vice-president, H. O. Clement, Valdosta, Ga.; second vice-president, B. H. Beverly, Apalachicola, Fla.; secretary, J. H. Trump, and treasurer, W. A. Griffith, Valdosta, Ga." The line will be about seventy miles long; engineer not yet appointed.

Washington, D. C.—It is reported that ex-Senator Henry G. Davis, 1517 H street, is interested in a plan to build a railroad eastward through Randolph and Pendleton counties, West Virginia, and that John W. Moore is making the survey.

Washington, D. C.—The Southern Railway is reported to be considering the building of

a railway from Memphis, Tenn., to Webb, Miss., about ninety miles. W. H. Wells is engineer of construction, Washington, D. C.

Williamsburg, Va.—It is reported that the Hampton, Yorktown, Williamsburg & Old Point Electric Railway will soon be built. O. D. Jackson is president; Andrew J. Miller, Charles Lechner and J. R. Nesbet of Philadelphia are also interested.

Street Railways.

Cumberland, Md.—The city council has passed an ordinance permitting the Cumberland Electric Railway Co. to extend its line along five streets.

Henderson, Ky.—The city council has given a first reading to a franchise for an interurban railway.

Jackson, Miss.—The city council has granted a franchise to the Jackson Belt Line Railroad Co.

Jacksonville, Fla.—The city council has passed a bill granting the Jacksonville Electric Co. the right to make extensions.

Laurel, Md.—The Laurel Traction Co. has been granted a franchise for a third rail electric railway. Among those interested are John G. Benton and Edward T. Benton of Laurel and Arthur B. Eaton, Matthew Hanley, John L. Hawthorne, Charles J. Fox, Murray S. Chism, Charles J. Barth, J. K. Lamb and J. Oberndorf, all of Philadelphia.

Lawton, Okla.—The Lawton Street Railway Co., capital \$600,000, has been incorporated by W. J. Pearson of New York City, S. O. Crutcher, W. E. Hudson and others of Lawton.

Louisville, Ky.—The Louisville Interurban Railway Co. will, it is reported, build an electric line from Louisville to Valley Station.

Muskogee, I. T.—Four different companies have applied for a street-car franchise, and it is reported that an interurban line will be built connecting several towns.

Nashville, Tenn.—E. E. Dandridge is reported to have the contract for building the Fifth-street extension of the West Nashville electric car line.

Paducah, Ky.—It is reported that a company has been formed to build an electric railway from Paducah to East Cairo, Ky., connecting with the local street railroad.

Parkersburg, W. Va.—The Parkersburg & Ohio Valley Electric Railway Co. has applied for a franchise in St. Mary's, W. Va. C. L. Williams of Parkersburg is secretary and treasurer of the company.

San Antonio, Texas.—G. Bedell Moore of San Antonio will, it is reported, extend the Laredo electric street railway two miles.

Machinery, Proposals and Supplies Wanted.

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The MANUFACTURERS' RECORD has received during the week the following particulars as to machinery that is wanted.

Belting.—R. F. Bryan, Union Point, Ga., wants belting.

Boiler and Engine.—See "Elevator."

Boiler and Engine.—Jos. M. Reel, Arapahoe, N. C., wants 20-horse-power boiler and engine.

Boiler and Engine.—J. E. Reel, Baird's Creek, N. C., wants boiler, engine and gin.

Boiler and Engine.—Wilson Laundry Machinery Co., Columbia, Pa., will be in market for 100-horse-power boiler and 75-horse-power engine, and would like evaporation capacity of boilers and efficiency tests of engine.

Boiler and Engine.—Richardson & Morris, Phoebus, Va., want small hoisting engine and boiler.

Boiler and Engine.—Cowpens Cotton Oil Co., Cowpens, S. C., wants to buy 12x20 automatic engine, 75 horse-power, with 80 to 85-horse-power boiler; new or second-hand, with guarantee; Atlas preferred.

Boiler and Engine.—Conrad Rawls Shoe Co., Louisville, Ky., will need 75 to 100-horse-power engine and boiler and dynamo, steam-heating apparatus and sprinkler system.

Brass and Iron Workers.—J. Carter Carstens, Oriol Building, Room 602, southeast

corner 6th and Locust streets, St. Louis, Mo., wants to correspond with manufacturers relative to having made small patented articles, such as automatic door-stop, made of brass or iron; wooden folding awning, etc.

Building Material.—Beggs & Cobb, Boston, Mass., want tarred paper roofing and lumber.

Building Material.—R. H. Stead, 906 F street N. W., Washington, D. C., will need building materials.

Building Material.—C. W. Valverde, Rayne, La., will need castings, steel balcony railing, steel ceiling, mosaic tile flooring, etc.

Building Material.—J. D. Elliott, Hickory, N. C., will need twenty-four steel rolling doors, galvanized skylights, glass, Portland cement, slate, plumbing, gas and electric wiring.

Building Materials.—Charles St. John, Southern Pines, N. C., will want lumber, lime, cement, sash, doors, blinds, plumbing supplies and electrical fixtures.

Cannery Machinery.—See "Woodworking Machinery."

Cans.—De Leon Canning Co., De Leon, Texas, will need several carloads of cans.

Cereal-mill Machinery.—Henry H. Hyatt, Washington, Ind., wants addresses of manufacturers of machinery for making breakfast foods.

Cotton Gin.—See "Boiler and Engine."

Cotton Gin.—See "Oil Mill."

Cotton Gin.—W. R. Young, Crystal Springs, Miss., wants to correspond with manufacturers of cotton-gin machinery.

Crematory.—C. G. Rives, comptroller, Shreveport, La., will open bids May 13 for erection of garbage crematory. Plans, specifications and daily capacity, together with certified check for \$500, must accompany each proposal; cost of plant, \$10,000; usual rights reserved.

Distillery Machinery.—Alfred Greenfield, 1008 Low street, Baltimore, Md., wants names of manufacturers of machinery for making whiskey.

Dredging.—Amos Stickney, colonel, engineers, U. S. Engineer Office, Army Building, New York, will open bids May 15 for dredging in Hudson river and Saugerties harbor, N. Y. Information furnished on application.

Dredging.—Sealed proposals will be received until May 25 at Engineer Office, U. S. A., Room 2, Custom-house, Norfolk, Va., for dredging Nansemond river, Virginia. Information furnished on application.

Dynamo.—See "Boiler and Engine."

Electrical Equipment.—Gainesville Cotton Oil Co., Gainesville, Ga., wants prices, delivered Gainesville, on one 50-horse-power or 75-horse-power alternating-current motor, 200 or 400 volts, 7200 alternations, two-phase.

Electrical Fixtures.—See "Building Materials."

Electric-light Plant.—New Franklin, Mo., will build water-works and electric-light plant; contractor's address, Business Men's Association; W. W. Carpenter, secretary.

Electric-light Plant.—A. S. Gravelly, clerk of council, Martinsville, Va., will receive bids until May 23 for granting franchise for installation of electric-light plant for city.

Elevator.—Sewell Paint & Glass Co., Station A, Kansas City, Mo., wants elevator, steam, 7000 pounds; 12x30 Corliss engine, 65x16 high-pressure boiler, 150-barrel oil tank and pump.

Flour-mill Machinery.—A. R. Hammer, High Point, N. C., will want machinery for burr mill, wheat, corn and feed mill.

Foundry Equipment.—Blacklock Foundry, South Pittsburg, Tenn., wants sad-iron finishing machinery, such as grinders, polishers, nickel-plating dynamos and supplies, etc.

Furniture Machinery.—See "Woodworking Machinery."

Gas and Electric Wiring.—See "Building Material."

Heating Apparatus.—See "Boiler and Engine."

Heating Apparatus.—Robt. L. Sutton, president, Lexington, Tenn., will need heating furnace.

Irons for Locks.—Geo. A. Zinn, major, engineers, U. S. Engineer Office, Wheeling, W. Va., will open bids May 21 for furnishing and delivering irons for locks for dam No. 18, Ohio river. Information furnished on application.

Lime-kiln.—D. Githens, Spring City, Tenn., wants full information, including price, etc., regarding lime-kiln with capacity of from twenty-five to sixty barrels per day.

Mattress Machinery.—Chas. C. Vaughn, Box 154, Winston-Salem, N. C., wants prices on machinery and full information regarding manufacture of mattresses and bed comforts.

Metal Grille.—Frank Wright, Cave Spring, Ga., wants to correspond with manufacturers of metal grille for fly screens.

Mill Supplies.—See "Woodworking Machinery."

Mill Supplies.—J. W. Taylor, Corinth, Miss., wants addresses of manufacturers of belting, pulleys and shafting.

Mill Supplies.—See "Woodworking Machinery."

Mining Equipment.—D. C. Stalback, Abbeville, S. C., wants concentrators.

Mining Machinery.—Lone Star Coal Co., Cisco, Texas, will want machinery for mining coal.

Oil Mill.—Coldwater Cotton Oil Co., Coldwater, Miss., will need complete outfit for cottonseed-oil mill, and probably for cotton gin.

Oil Mill.—Farmers' Oil & Guano Co., Sandersville, Ga., wants cottonseed-oil mill and ginny machinery.

Oil Mill.—Marietta Ice Co., Marietta, Ga., wants machinery for complete cottonseed-oil mill.

Oil-mill Machinery.—T. R. Felton, Wilson, N. C., wants information concerning cotton-oil refining equipments, estimates on cost of different size plants, etc.

Peanut Machinery.—Dadeville Oil Mill, Dadeville, Ala., wants peanut machinery for making oilcake.

Planing Mill.—W. R. Young, Crystal Springs, Miss., wants to correspond with manufacturers of planing-mill machinery.

Plumbing Supplies.—See "Building Materials."

Printing Machinery.—See "Woodworking Machinery."

Railway Equipment.—R. E. Johnson, Keweenaw Lumber & Timber Co., Seneca, S. C., is in market for thirty miles of second-hand rails and later on for other machinery.

Railway Equipment.—F. S. Royster Guano Co., Norfolk, Va., wants five tons second-hand 12-pound T rail, also several switches.

Refining (Oil) Machinery.—See "Oil-mill Machinery."

Saw-mills.—Mayo Tie & Lumber Co., T. R. Mayo, manager, De Soto, Mo., will purchase saw-mills complete.

Scales.—Dadeville Oil Mill, Dadeville, Ala., wants second-hand railroad track scales.

Sewer Works.—Henry B. F. Macfarland, H. L. West, John Biddle, commissioners of District Columbia, Washington, D. C., will open bids June 6 for constructing sections B and C of the B street and New Jersey avenue trunk sewer. Forms of specifications may be obtained at above office.

Sprinkler System.—See "Boiler and Engine."

Tank and Pump.—See "Elevator."

Telephone Equipment.—Harlan Telephone Co., Harlan, Ky., will need about 50 'phones, 25 miles of wire, 100-line switchboard, etc.

Textile Machinery.—See "Mattress Machinery."

Water-works.—See "Electric-light Plant."

Water-works.—Madison, Ga., contemplates construction of water-works, and solicits correspondence from contractors. Address S. F. Beckham, treasurer.

Water-works Improvement.—Chas. E. Boling, superintendent water-works, Birmingham, Ala., will open bids May 15 for constructing steel substructure and steel tank; cost not to exceed \$12,000.

Water-works Supplies.—A. M. Miller, lieutenant-colonel, engineers, office Washington Aqueduct, 2728 Pennsylvania avenue, Washington, D. C., will open bids May 22 for Venturi meters, sluice gates, gate valves, special castings, pumping engines, boilers, stokers and economizers. Information on application.

Woodworkers.—See "Brass and Iron Workers."

Woodworking Machinery.—A. W. Clark, Washington, Va., wants full line of stove machinery.

Woodworking Machinery.—G. L. Sanders, Wethersby, Miss., will need log and slab conveyors and some other minor supplies for circular-saw mill of 40,000 feet capacity.

Woodworking Machinery.—Seaboard Real Estate Co., Newport News, Va., wants addresses of manufacturers of woodworking machinery, furniture manufacturing machinery, machinery for canneries and printing machinery.

Woodworking Machinery.—H. T. Campbell & Son, Taylorsville, N. C., want to buy machinery for making locust treenail or ship pins.

Woodworking Machinery.—J. W. Miner, Ronda, N. C., wants second-hand 12-inch cigar-box planer.

Woodworking Machinery.—Banner Manufacturing Co., Mt. Airy, N. C., will need resaw, thirty-six inches; one-stamp pointer, one dovetail or mortiser, spindle lathe, etc., new or second-hand.

Woodworking Machinery.—Bond & Bond Co., Frank E. Bond, president, Neoga, Fla., wants one complete saw-mill equipment, including edger, trimmer, cut-off saw, steam jump saw, rollers, timber sizer, lath mill, filing-room machinery, shafting, pulleys, etc.

Woodworking Machinery.—Camden Casket and Coffin Factory, Camden, S. C., will want 100-horse-power horizontal boiler, 60-horse-power horizontal engine, automatic jointer, large band saw, reversible shaper, 10-inch four-side molder, 30-inch surfacer, steam coils and piping for heating purposes, dry-kiln piping, lumber conveyors, small saw-mill, shaving and dust conveyors, dry-kiln car trucks and track.

TRADE NOTES.

Ice-plant Contract.—In determining to double its 25-ton ice and cold-storage plant the Neosho (Mo.) Ice Co. took great care in selecting the make of machinery to be used. It is therefore a matter of interest to know that the contract was let to the Ruemmel-Dawley Manufacturing Co. of St. Louis, Mo.

Peters Cartridge Co.—This company announces the removal of its New York office to 93 Chambers street. Its well-known make of ammunition is extensively demanded and has gained some notable victories at recent tournaments which have been referred to in these columns. T. H. Keller is manager of the Eastern department.

Hicks' Railway Equipment.—There is no cessation in the many orders being received by the Hicks Locomotive and Car Works, 277 Dearborn street, Chicago. Recent sales included freight locomotives, switch engines, parlor cars, baggage cars, freight cars and other character of rolling stock. Prominent transportation systems throughout the country sent the orders.

Inducements for Manufacturers.—Progressive towns that have manufacturing advantages do not wait for manufacturers to select sites in their midst, but seek them and offer inducements for the location of industrial plants. New Franklin, Mo., is offering such inducements, and invites correspondence for particulars. Address Business Men's Association; W. W. Carpenter, secretary.

Chair-Factory Manager.—An opportunity for a competent chair-factory manager is open at Franklin, N. C. The Franklin Manufacturing Co. of that town proposes changing its present output of double cane and split seat chairs to a line of open cane and cobbler seat chairs and rockers. An experienced man fully capable of managing this new departure is wanted by the company. Write for further particulars.

Rossiter, MacGovern & Co.—This incorporated firm announces a change in its New York address, having removed from 111 Broadway to the Whitehall Building, 17 Battery Place. Its branch offices are at 110 State street, Boston, and Missouri Trust Building, St. Louis. Rossiter, MacGovern & Co. are widely known as manufacturing and installing electrical and steam machinery, their plants being located in Jersey City and St. Louis.

The Ball Engine.—Probably no make of engine is better known than that designed and built by the Ball Engine Co. of Erie, Pa. Its successful operation in direct connection to electrical generators is especially notable. Beloit (Wis.) Iron Works has ordered a 70-horse-power Ball engine for direct connection, and four vertical cross-compound engines of Ball make, each direct-connected to 150-kilowatt generator, have been ordered for First National Bank Building, Chicago.

Sale of Coal Mines.—Receiverships often result in sales of established and profitable industries. A valuable property of this character is the mines of the Needmore Coal Co. at Needmore, Ala. The equipment is new and modern, capacity 500 tons daily of domestic, steam and coking coal. The mines have been profitable under the receivership. H. F. Rodgers, the receiver, of Chattanooga, Tenn., will offer this property at public outcry on May 13. Write for particulars.

Cotton-mill Sale, etc.—Announcement is being made regarding the sale of certain properties that offer exceptional inducements to investors. The cotton mill, electric light and power plants, water-power and entire franchises, etc., of the Eatonton Electric Co. at Eatonton, Ga., are the properties in question. They will be offered at public sale on May 28. Information can be obtained by

addressing Capt. A. S. Reid, trustee, Eaton, Ga., or Alex. Prouditt, referee, Macon, Ga.

Water-Power for Sale.—The development of water-power properties is one of the leading factors in the South's industrial growth. A property of this character that is already developed for 7000 horse-power is available to purchase, and the Real Estate Trust Co., Richmond, Va., can give particulars regarding the offering. The power is in North Carolina, twelve hours' ride from New York, and includes a \$100,000 knitting mill, townsite and 2000 acres of land suitable for industrial purposes.

McMichael & Hunter, Architects.—Preparing plans and specifications for the many buildings of all kinds being erected throughout the South has engaged the services of some well-known architects in that section during recent years. James M. McMichael of Charlotte, N. C., is one of the leading architects there. It is interesting to note that Mr. McMichael has formed a partnership with Leonard L. Hunter, and will continue business under the firm name of McMichael & Hunter.

Manufacturing Site for Sale.—There are many unoccupied manufacturing sites available in that great beehive of factories—the State of Pennsylvania. Those in control of sites at times find occasion to put their properties on the market. Richard O'Connor, 312 Keystone Building, Pittsburg, Pa., has a valuable mill site for sale. It includes 1300 acres of land. Unlimited quantities of limestone and other stone for building purposes and cheap fuel are at hand. Possible purchasers are invited to send for details.

Inducements for Iron Furnace.—The operation of iron furnaces has proven one of the most important of Southern industries. There are many advantageous sites for blast furnaces not yet occupied, and one in particular is available, with inducements. These inducements comprise free site and \$25,000 offered by a progressive town, where brown ore, limestone and charcoal can be obtained in abundance. J. W. White, general industrial agent Seaboard Air Line Railway, Portsmouth, Va., can give information to inquirers.

The Obermayer Co.—The S. Obermayer Co., manufacturer of foundry facings, supplies and equipments, is making large improvements at its Chicago plant, Eighteenth and Rockwell streets. New machinery and new buildings have been added, increasing capacity about 40 per cent. During the past year improvements were made at the Cincinnati and Pittsburg plants, doubling their capacities. The Obermayer Company now has these three plants in full operation, running each plant twenty hours per day, in order to supply demands.

Wants to Interest Capital.—Railway companies are usually alert to promote the industrial development of the country through which their railways extend. They are often desirous of interesting capital in the establishment of lumber mills, manufacturing plants of every kind, mining operations, farming, etc. The Ozark & Sulphur Mountain Traction Co. is now prepared to correspond for that purpose, and invites industrial agents, banking companies, brokers and real-estate dealers to write the general manager, Harold A. Oertling, at Harrison, Ark.

Iron, Marble and Tale.—North Carolina continues to be one of the foremost of Southern States in industrial development, and new properties are constantly being acquired there for thorough exploitation. Marble, iron and tale properties offer exceptional opportunities for investment at this time, and one property combining deposits of the minerals named in the State is now offered for sale. An arrangement for cash payment would enable a buyer to obtain this property at an exceptionally low figure. Alfred S. Emerson, Murphy, N. C., can give full particulars to investigators.

Scranton Steam Pump Co.—This well-known company's product is not limited to the apparatus indicated by its title, but, as many well-satisfied users are aware, the company manufactures Lippincott shaking grates, steam separators, traps, etc., as well as single and duplex steam pumps. So rapidly has the demand increased that the company has practically trebled its plant in less than a year and yet finds additional facilities needed. To assist in securing these the Scranton Steam Pump Co. has purchased the American Foundry & Machine Co.'s plant at Kingston, Pa.

Messrs. Pawling & Harnischfeger.—This prominent firm of Milwaukee, Wis., is well known throughout the industrial world for

their traveling cranes. Their devices are in extensive use throughout the United States. Messrs. Pawling & Harnischfeger state that the recent fire at their plant destroyed only one building, and that they continue to receive all orders and make prompt shipments. They have leased shops lately vacated by Nordberg Manufacturing Co., have purchased new machinery, and will now be in a better position to build cranes and hoists than they were before the fire.

Pittsburg's Palace of Light.—One of the most beautiful effects in regular equipment for electric lighting is produced by the lamps in the Farmers' Deposit National Bank Building at Pittsburg. This is a 24-story building, and the little electric stars distributed singly and in clusters throughout the structure diffuse their light so that by night the building is a vast monument of clear, white radiance, a landmark for miles around. There are over 2500 lamps, with a total illuminating power equal to about 125,000 candles. The method of installation gives a daylight effect. The Nernst lamps are used.

Brown Corliss Engine.—Heavy-duty Corliss engines, both vertical and horizontal, have their place in industry, and some of the most important machinery builders devote their attention to that class of power equipment. The Brown Corliss Engine Co., Corliss, Wis., has made a great success of the type of machines its title mentions. Its most recent orders include one from Saxony Worsted Mills, Newton, Mass., for a 16x26x42-inch cross-compound Corliss engine, and from Berlin Mills Co., Gorham, N. H., for four 24x42 simple Corliss engines. Besides engines, hoisting machinery, compressors, etc., are built at the Brown works.

York Manufacturing Co.—This prominent manufacturer continues to fill many orders for its well-known ice and refrigerating machinery. Its plant at York, Pa., is making shipments constantly to all parts of the United States. Most recent shipments included a 10-ton refrigerating plant for New Haven, Conn.; 15-ton ice plant for Camden, S. C.; 10-ton ice plant for Clinton, La.; 15-ton ice plant for Tug River, W. Va.; 175-ton cross-compound refrigerating machine and 50-ton ice plant for East St. Louis, Ill. Nor is the York Manufacturing Co.'s orders confined to America, for it has just received an order from Piree, Greece, for two-ton plant.

Perfect Heating Systems.—In constructing modern buildings one of the most important factors for the comfort of occupants is the heating plant. On first thought such plants might be considered easy to install, but their design, arrangement and construction requires special study. The Peck-Hammond Company of Cincinnati, Ohio, has given much time and study to heating systems, and the equipments it installs have a reputation that is enviable for best possible results. The company deserves the success it has gained through careful and honest work and practical principles. The Peck-Hammond warm-air system is very favorably known in the South, where many buildings are equipped with it.

Wonders of the World.—It is a fact that when you walk over the Brooklyn Bridge you use the structure built by Roebling. When you talk by telephone from New York to Chicago you do so over No. 8 hard-drawn copper wire made by Roebling. When you telegraph from San Francisco to New York you do so over a continuous line of copper wire made by Roebling. When you cable across the Atlantic ocean by the Commercial Cable you do so through copper wire made by Roebling. The services mentioned are undoubtedly among the wonders of the world. It is almost needless to add that "Roebling" means the John A. Roebling's Sons Co., works at Trenton, N. J.; offices at 117 Liberty street, New York; 171 Lake street, Chicago; 25 Fremont street, San Francisco, and 83 Superior street, Cleveland.

New South Brick Machinery.—Many establishments are being enlarged and new ones being built to supply bricks for the numerous buildings erected throughout the South. A prominent Southern firm manufactures the New South brick machinery and all kinds of brickyard supplies, and find their product in great demand. Messrs. J. C. Steele & Sons of Statesville, N. C., are the manufacturers referred to, and they report that their orders continue to be numerous. They have recently shipped or have orders on file for outfits (automatic) from Georgia, North Carolina, Arkansas, Tennessee, Idaho, South Carolina, Alabama and Virginia. Smaller outfits will be sent to Alabama, North Carolina, South Carolina, Kentucky and Indian Territory. The firm has sold thirty-three of their new automatic rotary cutters this year.

Their works will be extensively enlarged to meet the increasing demand.

Allis-Chalmers' Prosperity.—It's the kind of prosperity that is so general during this most active period of the industrial history of the United States. The Allis-Chalmers Company, general offices at Chicago, is one of the most important machinery designing and constructing companies, and its regular quarterly dividend of 1½ per cent. has been declared. The company says that its present contracts far exceed the volume of business on the books at any time since organization, notwithstanding the different plants' capacity having been largely increased. It continues, saying: "We can see no abatement of prosperity in our various branches of manufacture. There seems to be an unlimited demand for all kinds of high-grade machinery, which is certainly a good indication that prosperity is enjoyed in all lines of manufacture."

To Architects and Builders.—There was never a good thing introduced but that imitations were attempted to be palmed off on the unsuspecting public before they could be fortified with sufficient knowledge to distinguish between the genuine and the spurious. In regard to hollow concrete building blocks, architects and builders should be wary and to investigate before allowing such blocks to be put into their buildings, unless they are authorized by the Harmon S. Palmer Hollow Concrete Building Block Co. of Washington, D. C., owner of basic patents covering machines, walls and blocks. Suits against infringers have already been entered in the federal courts in Brooklyn, N. Y., and Jackson, Mich., and all parties infringing the rights of the company will be prosecuted. Disregard of this notice will subject infringers to litigation and their property to liens.

Large Electrical Generators.—Probably the largest contract for electrical generators ever placed for use west of the Rocky mountains has been awarded by Stone & Webster of Boston, managers of electric-power, traction and lighting plants along Puget Sound, to the General Electric Co. The order is for six machines, two to be furnished to Tacoma Industrial Co. for their development of White river, and four to Pierce County Improvement Co. for developing Puyallup river, including the flow from Mt. Rainier glaciers. The generators will be three-phase 60-cycle, of 3500-kilowatt capacity each at 2300 volts and 225 revolutions. These developments are going forward, and every effort will be made to complete them at the earliest possible date to meet the growing demands for power in the Puget Sound district, and to supply the electric interurban road between Seattle and Tacoma, as well as the railway and power distributing systems in those cities which are now controlled by Stone & Webster.

Successful Flooring Machines.—With the great demand for woodwork has come a like demand for the best possible machinery for producing it. The manufacture of flooring especially requires practical, economical and durable equipments. The H. B. Smith Machine Co., Smithville, N. J., has been highly successful with its flooring machines. Many important Southern woodworking plants are using them. Heth Canfield & Son of St. Augustine, Fla., say that the Smith machine "is the first machine we have had that would make good novelty siding from this kind of lumber (meaning hard yellow pine, from a circular mill, running from seven-eighths inch to one and one-half inches thick) without first running it through a sizing machine. We also find it to be a first-class flooring machine." One of these machines has been shipped to the Camden (S. C.) Lumber & Manufacturing Co., and another is being shipped to Georgia. The Smith Company expects to supply many others to Southern mills.

Making Standard Scales.—The design and manufacture of scales is an important branch of industry. Their very nature demands careful and accurate work, combined with perfect principles. An enviable reputation in this direction has been earned by the Standard Scale & Supply Co., Ltd., of Pittsburg, Pa. The Standard Scales are in great demand throughout the United States, and in a number of foreign countries; in fact, the demand has reached that point where the company requires increased facilities. These will be procured by the erection of an entirely new manufacturing plant. A site of eight acres has been secured at Beaver Falls, Pa., and work has begun. This plant will have double the output of the present works at Bellefontaine. It will include an 80x140-foot foundry, 36x50-foot boiler-house (both of all-steel construction), forge, machine and woodworking departments 200x100

feet, separated by partitions, assembly, painting and packing rooms, and warehouse 100x245 feet, power-house 31x36 feet and pattern storage building 40x70 feet, all of brick. The electrical drive will be used throughout, and the power plant will consist of two 125-horse-power compound engines directly connected to 75-kilowatt generators and two 72-inch by 16-foot boilers. A trackage system will connect all the departments, so that the products of the plant will progress continuously from foundry through finishing departments to warehouse platforms ready for shipment by rail.

Power Transmission in France.—The Gas Company of Clermont-Ferrand, France, is making an interesting hydro-electric installation, designed to reinforce its existing electrical plant. The new works are situated on either side of the river Sioule, below a large dam, which forms a lake about four miles long, having an average breadth of 130 yards and a surface of 250 acres. Independent pipe lines, fixed in masonry, will supply each of the six 1000-horse-power turbines, which are of the horizontal axle "Francis" type. Each turbine will be connected to a Westinghouse three-phase alternator of 800 kilowatts at 1000 volts and 3333 revolutions per minute. The two exciters, of 37.5 kilowatts each, are driven by small auxiliary turbines. The voltage will be stepped up to 20,000 by means of Westinghouse monophase transformers, grouped in threes. The overhead transmission line is to be double, and about thirty miles in length. Poles and crossbeams will be of wood, the latter being boiled in paraffin and then covered with a layer of tar. The setting up of the line, as well as the construction of the electrical and mechanical apparatus, has been undertaken by the Société Anonyme Westinghouse of Havre. The hydraulic part of the work has been hurried forward during the past year, and is now well advanced, while the mechanical and electrical equipment is just finished. Power will be sold at Clermont-Ferrand, which is a great center for the rubber trade, for both lighting and power, and considerable development of the existing works will be expected with the advent of a power so simple and so cheap as electricity.

TRADE LITERATURE.

Roebling Wire-Rope Prices.—Buyers of the celebrated wire rope manufactured by the John A. Roebling's Sons Co. of Trenton, N. J., should not fail to have on hand a copy of the company's latest price-list and discount sheet.

Foundry Information.—Molders and foundrymen who have heretofore not become acquainted with the Obermayer Bulletin should secure a copy of the publication. It is a compendium of foundry information for molders, and is issued by the S. Obermayer Company, the well-known and reliable foundry and supply house. The Detroit office, 1318 Majestic Building, issues the bulletin referred to.

Valve Reseating.—Steam-users and other operators requiring to reseat valves will find something to interest them in the illustrated leaflet issued under the title of "Our Silent Salesman." This publication tells briefly the facts about the Hall Valve Reseating Machine, the Hall Plug-Cock Machine, etc. These machines reseat on the pipe, and appeal particularly to users on that account. Messrs. C. F. Hall & Son, 527 Kirk Block, Syracuse, N. Y., manufacture these tools.

Application of Storage Batteries.—Among numerous applications to which the "Chloride Accumulator" has been adapted, one of the more recent, and by no means least important, is its use in connection with the D. C. exciters in A. C. power and lighting plants. Details regarding the satisfactory results obtained from such installation are given in a leaflet issued, with illustrations, by the Electric Storage Battery Co., Allegheny avenue and Nineteenth street, Philadelphia, Pa. This company manufactures the "Chloride Accumulator."

Care of Saw-mills.—Operators of saw-mills and other plants of a like nature find that careful attention to equipments is essential in obtaining satisfaction and durability from band mills, band resaws, band rip saws, band saws and their accessories. Instruction on the erection and care of such machinery is therefore desired, especially when given by an authority on the subject. An artistic pamphlet giving these instructions has been issued by the J. A. Fay & Egan Company of Cincinnati, Ohio, the well-known manufacturer of patent woodworking machinery—single machines or complete equipments—adapted for any kind of plant. Any sawyer can obtain a copy of the booklet by addressing the company at 270 West Front street.

FINANCIAL NEWS.

The Manufacturers' Record invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

Review of the Baltimore Market.

Office Manufacturers' Record,
Baltimore, Md., April 29.

Cotton Duck issues were again a feature in the Baltimore stock market during the past week, owing to the announcement that a committee has been appointed to devise a plan for the complete absorption of the Mt. Vernon-Woodberry Cotton Duck Co. by the United States Cotton Duck Corporation, which already controls it. The effect of this announcement was to cause a small advance in Cotton Duck income bonds and some little trading. There was also activity and increase of strength in Seaboards following favorable reports concerning the company and the news that a syndicate formed by Laidenburg, Thalman & Co. of New York had taken the \$6,000,000 of 4 per cent. bonds on the Birmingham extension, United Railways were a little higher; Consolidated Gas was dull, as were G. B. S. Brewing issues. Trust-company and bank stocks were very quiet, and there was comparatively little doing in investment securities.

In the trading United Railways common advanced from 12 1/4 to 13 1/4, and reacted to 12 1/2; the income bonds rose from 68 1/4 to 68 3/4, fell back to 68 1/4 and recovered to 68 3/4; the 4 per cents sold at 93 1/2 and 93 3/4, and United Railway scrip at 60. United Light & Power preferred was traded in at 38 and 39, the scrip at 50 and the 4 1/2s at 88. Consolidated Gas sold at 68 1/4 and 70, the 5s at 113 and the 4 1/2 per cents at 101 1/2. Seaboard common rose from 24 1/2 to 26 1/4, and reacted to 25 1/4, finally recovering to 26; the preferred advanced from 40 1/4 to 42 1/4, dropped back to 42, and then recovered the loss; the 4 per cents sold at 81 1/4 to 82 1/2, and the 5 per cents at 103 1/2 and 103 3/4. Cotton Duck common sold at 4, and then at 3 1/2; the income bonds at 26, but they dropped to 25 and rose again to 26, while the 5 per cents sold at 70 and 70 1/2. G. B. S. Brewing common changed hands at 12; the income bonds at 36 1/2 to 37 1/2; the 1sts at 40 1/2 and 40 3/4, and the 1st certificates at 52.

In the trust-company group International sold from 135 to 136, and Maryland Casualty at 50 1/4; Howard Bank was traded in at 12 1/2, and Marine at 37 1/4.

Other securities figured in the dealing as follows: Atlantic Coast Line common, 129 to 129 1/2; do. 1st 4s, 94 to 95 1/4; do. new 4s, ex-interest, 86 and 87; do. 4s, certificates (Connecticut), 92; Georgia Southern & Florida 5s, 115; International Mercantile Marine preferred, 33 down to 30 1/2; Georgia & Alabama Consolidated 5s, 110 and 111; Anacostia & Potomac 5s, 97 1/2 and 97 3/4; Alabama Consolidated Coal & Iron preferred, 82 1/2; Maryland Telephone 5s, 85; United States Cotton Duck, 5; Baltimore Fire Insurance, 21 1/4; Fireman's Insurance, 22 1/4; Carolina Central 4s, 95 1/2; City & Suburban 5s (D. C.), 98; Seaboard & Roanoke 5s, 112 1/2; George's Creek Coal, 87; West Virginia Central 6s, 112 1/2; Georgia, Carolina & Northern 5s, 110 1/2; Albany & Northern 5s, 95 1/4.

The Union Trust & Deposit Co., capital \$500,000, has been organized at Parkersburg, W. Va., with, it is reported, ex-Senator Johnson N. Camden as president. It will, it is stated, begin business May 1, succeeding the Citizens' Trust & Guarantee Co.

SECURITIES AT BALTIMORE.

Last Quotations for the Week Ended
April 29, 1903.

Railroad Stocks.		Par.	Bid.	Asked
Georgia Sou. & Fla. 1st Pref.	100	98 1/4	100	
Georgia Sou. & Fla. 2d Pref.	100		78	
United Railways & Elec. Co.	50	12 1/2	12 3/4	
Seaboard Railway Common	100	25 1/2	26	
Seaboard Railway Preferred	100	42 1/4	42 3/4	
Atlantic Coast Line of Conn.	100	27 1/2	30 1/2	

Bank Stocks.		Par.	Bid.	Asked
Citizens' National Bank	10	30		
Commercial & Far. Nat. Bank	100		132	
German Bank	100	108		
Manufacturers' National Bk.	100	102		
National Bank of Commerce	15	28		
National Exchange Bank	100	194		
National Howard Bank	10	12		
National Marine Bank	10	37		
National Mechanics' Bank	10	31 1/2		
Second National Bank	100	190		

Trust, Fidelity and Casualty Stocks.		Par.	Bid.	Asked
Baltimore Trust & Guarantee	100	200	312 1/4	
Continental Trust	100	198	200	
Fidelity & Deposit	100		165	
International Trust	100	135 1/2	140	
Maryland Casualty	25	50 1/4	52	
Maryland Trust	100	193		
Mercantile Trust & Deposit	50		159 1/4	
Union Trust	50	65	69	
U. S. Fidelity & Guaranty	100	142	145	

Miscellaneous Stocks.		Par.	Bid.	Asked
G. B. & S. Brewing Co.	100	12 1/4	13	
United Elec. L. & P. Pref.	50	37 1/2	39	
Cotton Duck Voting Trst.	100		3 1/2	
Consolidated Coal	100	84	86	
George's Creek Coal	100	80	80	
Consolidated Gas	100	69 1/4	70	

Railroad Bonds.		Par.	Bid.	Asked
Albany & Northern 5s	100	95 1/4	96	
Atlanta & Charlotte 1st 7s, 1907	111	111	112	
Char. Col. & Aug. 2d 7s, 1910	112			
Columbia & Greenville 1st 6s, 1916	116	120		
Georgia, Car. & North. 1st 5s, 1929	109 1/2	110 1/2		
Georgia South. & Fla. 1st 5s, 1915	114 1/2	115 1/2		
Georgia Pacific 1st 6s, 1922	121			
Petersburg, Class A 5s, 1925	115 1/4			
Richmond & Danville Gold 6s, 1915	117			
Seaboard & Roanoke 6s, 1916	105			
Seaboard & Roanoke 5s, 1926	112 1/2	113		
Southern Railway Con. 5s, 1904	116			
Virginia Midland 1st 6s, 1906	104			
Virginia Midland 5th 5s, 1926	114			
West Virginia Central 1st 6s, 1911	115 1/2	117		
West Virginia Central 1st 6s, 1911	112	112 1/2		
Wilmington & Wel. Gold 5s, 1925	120			
Charleston City Railway 5s, 1923	105			
Knoxville Traction 1st 5s, 1923	101 1/4			
Newport News & Old Pt. 5s, 1938	108			
Norfolk Street Railway 5s, 1944	111			
United Railways 1st 4s, 1949	93 1/2			
United Railways Inc. 4s, 1949	68 1/2	68 3/4		
Seaboard 10s	102 1/2	103 1/2		
Lexington Railway 1st 5s	104			
Georgia & Alabama Con. 5s	110 1/2			
Augusta Ry. & Elec. 1st 5s	101			

Miscellaneous Bonds.		Par.	Bid.	Asked
Mt. V. & Woodby Cot. Duck 5s	68 1/4	70 1/4		
Mt. V. & Woodby Cot. Duck Inc.	25	25 1/2		
G. B. & S. Brewing 1st 3-4s	49	49 1/2		
G. B. & S. Brewing 2d Income	36 1/2	37		
United Elec. Light & Power 4 1/2s	87 1/2	88		
Atlanta Gaslight 1st 5s, 1947	102 1/2			
Consolidated Gas	110 1/2			
Consolidated Gas 5s, 1939	112	113		

SOUTHERN COTTON MILL STOCKS

Quotations Furnished by Hugh Mac-
Rae & Co., Wilmington, N. C., for
Week Ending April 28.

	Par.	Bid.	Asked
Abbeville Cotton Mills (S. C.)	75		
Aiken Mfg. Co. (S. C.)	90	92	
Anderson Cotton Mills (S. C.)	124	126	
Arkwright Mills (S. C.)	116	120	
Augusta Factory (Ga.)	65		
Avondale Mills (Ala.)	90		
Belton Mills (S. C.) (old)	100		
Bibb Mfg. Co. (Ga.)	108 1/2		
Brandon Mills (S. C.)	101		
Buffalo Cotton Mills (S. C.)	101		
Cabarrus Cotton Mills (N. C.)	122		
Chiquola Mfg. Co. (S. C.)	100	107	
Clifton Mfg. Co. (S. C.)	170	177	
Clinton Cotton Mills (S. C.)	118 1/4		
Courtenay Mfg. Co. (S. C.)	130	135	
Columbus Cotton Mills (Ga.)	94	100	
Dallas Mfg. Co. (Ala.)	90		
Darlington Mfg. Co. (S. C.)	95		
Eagle & Phenix Mills (Ga.)	99		
Easley Cotton Mills (S. C.)	100	103	
Enoree Mfg. Co. (S. C.)	87 1/2		
Enterprise Mfg. Co. (Ga.)	75	80	
Exposition Cotton Mills (Ga.)	150		
Gaffney Mfg. Co. (S. C.)	103		
Gainesville Cotton Mills (Ga.)	95		
Granby Cotton Mills (S. C.)	100		
Granby Cot. Mills (S. C.) 1st Pfd.	90	102	
Graniteville Mfg. Co. (S. C.)	160	163	
Greenwood Cotton Mills (S. C.)	99		
Grendel Mills (S. C.)	105		
Henrietta Mills (N. C.)	203 1/2		
King, John P., Mfg. Co. (Ga.)	90	91	
Lancaster Cotton Mills (S. C.)	100	110	
Lancaster Cot. Mills (S. C.) Pfd.	104		
Langley Mfg. Co. (S. C.)	100	102	
Laurens Cotton Mills (S. C.)	170		
Lockhart Mills (S. C.)	101		
Louise Mills (N. C.)	95		
Louise Mills (N. C.) Pfd.	102		
Marlboro Cotton Mills (S. C.)	107		
Mayo Mills (N. C.)	170		
Mills Mfg. Co. (S. C.)	90		
Mills Mfg. Co. (S. C.) Pfd.	103		
Monarch Cotton Mills (S. C.)	96		
Monaghan Mills (S. C.)	90	100	
Newberry Cotton Mills (S. C.)	120		
Norris Cotton Mills (S. C.)	110	113 1/4	
Olympia Cotton Mills (S. C.)	104		
Olympia Cotton Mills (S. C.) Pfd.	100		
Odell Mfg. Co. (S. C.)	100	103	
Orangeburg Mfg. Co. (S. C.) Pfd.	103		
Orr Cotton Mills (S. C.)	103		
Pacolet Mfg. Co. (S. C.)	195		
Pelzer Mfg. Co. (S. C.)	172		
Piedmont Mfg. Co. (S. C.)	176		
Poe, F. W., Mfg. Co. (S. C.)	140		
Richland Cotton Mills (S. C.)	99		
Richland Cotton Mills (S. C.) Pfd.	102		
Roanoke Mills (N. C.)	100		
Saxon Mills (S. C.)	101		
Siber Mfg. Co. (Ga.)	65	67	
Southern Cotton Mills (N. C.)	95		
Spartan Mills (S. C.)	135		

Trion Mfg. Co. (Ga.)	125	150
Tucapau Mills (S. C.)	135	
Union Cotton Mills (S. C.)	152 1/4	
Union Cotton Mills (S. C.) Pfd.	100	102
Victor Mfg. Co. (S. C.)	130	
Warren Mfg. Co. (S. C.)	100	
Warren Mfg. Co. (S. C.) Pfd.	106	
Washington Mills (Va.) Pfd. & Com.	104	
Whitney Mfg. Co. (S. C.)	110	20
Wilmington Cot. Mills (N. C.) Pfd.	100	
Wiscasset Mills (N. C.)	115	118
Woodruff Cotton Mills (S. C.)	97	

A HANDSOME EDIFICE.

The International Trust Co. of Baltimore Occupies Its New Building.

The International Trust Co. of Baltimore has taken possession of its new building at 23-25-27 East Baltimore street, between Charles and Light streets. This is one of the handsomest, most comfortable and convenient financial edifices in the country, and in its arrangements provides customers and all others who have business with the institution with ample facilities for rapidly concluding their transactions. The exterior of the structure, which occupies a lot 55 feet wide and 100 feet deep, is of white marble, excellently proportioned and constituting a beautiful and impressive ornament to the thoroughfare. The entrance is wide, opening immediately upon the banking-room, that is splendidly lighted from a broad skylight of colored glass, which occupies a large portion of the roof. The wainscoting and counters are of verde antique marble, and the tops of the latter are made of solid mahogany, while the screens around the same are of mahogany and plate glass. The walls are painted a light drab, with panels in light gray and borders and other ornamentation in green and gold. All the furniture is mahogany, the partitions separating the different offices being also made of that wood, while the doors are of the same material, with heavy glass panels. Large mahogany settees with high backs are provided for customers. Electricity is used exclusively for artificial light, there being no gas whatever in the building.

The safe-deposit quarters, a new feature for the company, are spacious and very convenient. There is not only plenty of room, but the booths provided for customers are close to the vault, and each is lighted by a window, taking the light directly from outside. Special booths are set aside for the convenience of ladies, for whom a reception room is also provided, with a lady attendant. Downstairs is a large vault for the storage of silver, and there is also a rear door opening to German street, affording convenient access for conveying or removing packages to or from this vault, and also furnishing an additional and convenient entrance for general use. This entrance is immediately beside another building that is also owned by the company, but which fronts on German street, being separated from the banking-house by a courtyard, so that both structures have ample light.

The basement of the new building contains heating and ventilating apparatus, both being of the most thorough and complete patterns; toilet-rooms and baths for the officers and employees, with a separate locker for each man. On the second floor, above the safe-deposit vault, are rooms for the directors and committee meetings, which are entered from a wide passageway that overlooks the entire banking floor. Altogether the effect of the interior is light and airy, and the plan is such as to insure coolness in summer as well as warmth in winter.

Just before the building was taken possession of by the company the president and directors opened it for the inspection of the friends and patrons of the institution, a reception being held on April 28 from 3 to 10 P. M.

The officers of the company are: Douglas H. Gordon, president; J. Wm. Midden-

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dorf and E. H. Thomson, vice-presidents; Chas. D. Fenhagen, secretary and treasurer; directors, Summerfield Baldwin, Angus Cameron, Isaac H. Dixon, Richard H. Edmonds, Douglas H. Gordon, B. Howard Haman, Chas. H. Koppelman, Lloyd Lowndes, Wm. A. Marburg, J. Wm. Middendorf, Robert Ramsay, Simon Rosenberg, C. Sidney Shepard, Francis E. Waters, Geo. W. Watts, Chas. T. Westcott, R. Lancaster Williams, Stevenson A. Williams, Samuel C. Rowland, Townsend Scott, W. C. Seddon, E. H. Thomson, David Hutzler, Chas. K. Oliver and Joseph Clendenin.

It is reported that a new financial institution to be called the Citizens' Savings Bank & Trust Co. will soon begin business at Birmingham, Ala. The names of those interested are not yet announced.

The Fort Worth Stockyards National Bank of Fort Worth, Texas, has been approved by the comptroller of the currency; capital \$100,000. The organizers are M. S. Sansom, S. B. Burnett, T. W. Slack, Royal A. Ferris and Jos. B. Gogins.

[For Additional Financial News, See Pages 28 and 29.]

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